



Department of Higher Education

U.P. Government, Lucknow

National Education Policy-2020

Common Minimum Syllabus for all U.P. State Universities

Co-curricular course: Semester-3

Course Title: Human Values and Environment studies

Name	Designation	Affiliation
Steering Committee		
Mrs. Monika S. Garg, (I.A.S.), Chairperson Steering Committee	Additional Chief Secretary	Dept. of Higher Education U.P., Lucknow
Prof. Poonam Tandan	Professor, Dept. of Physics	Lucknow University, U.P.
Prof. Hare Krishna	Professor, Dept. of Statistics	CCS University Meerut, U.P.
Dr. Dinesh C. Sharma	Associate Professor	K.M. Govt. Girls P.G. College Badalpur, G.B. Nagar, U.P.

Syllabus Developed by:

S.No.	Name	Designation	Department	College University
1.	Dr. Ajai Prakash	Astt. Professor	Business Administration	University of Lucknow
2.	Dr. Manuka Khanna	Professor	Political Science	University of Lucknow
3.	Dr. Amita Kannaujia	Professor	Zoology	University of Lucknow
4.	Dr. Rashi Kesh	Sr. Astt. Professor	HRD, FMS	VBS Purvanchal University, Jaunpur
5.	Dr. Jyoti Prakash	Sr. Astt. Professor	Amity Inst. of Biotechnology	Amity University, Lucknow
6.	Prof. Nishant Kumar	Astt. Professor	Business Administration	Lucknow University, Lucknow

Syllabus: Human Values and Environment studies

Programme/Class: Certificate	Year: Second	Semester: Third
Co-Curricular Course		
Course Code: Z030301	Course Title: Human Values and Environment studies	
Course outcomes: The mission of the course on Human Values and Environmental Studies is to create morally articulate solutions to be truthful and just and to become responsible towards humanity. The course seeks to establish a continuous interest in the learners to improve their thought process with intent to develop a new generation of responsible citizens capable of addressing complex challenges faced by the society due to disruptions in human interactions effecting human values. This course works towards <ul style="list-style-type: none">• Building fundamental knowledge of the interplay of markets, ethics, and law,• Look at various challenges faced by individual to counter unethical issues• Look at core concepts for business ethics• Look at core concepts of anti-corruption• Look at core concepts for a morally articulate solution evolver to management issues in general,• Issues of sustainable development for a better environment.• To know how environmental degradation has taken place.• Be aware of negotiations and international efforts to save environment.• How to develop sustainably?• Efforts taken up by UN in Sustainable Development.• Efforts taken by India in Sustainable Development.		

<ul style="list-style-type: none"> The course intends to create a sense of how to be more responsible towards the environment. Upon finishing of the course students will be able to come up with using ethical reasoning for decision making and frame ethical issues as well as operationalise ethical choices. The course integrates various facets of human values and environment. 		
Credits: 2		
Max. Marks: 100		Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 2-0-0 As the course requires two areas of Human Values and Environment Studies institutions can even opt for a parallel delivery		
Unit	Topics	No. of Lectures Total=30
I	Human Values- Introduction- Values, Characteristics, Types ,Developing Value system in Indian Organisation , Values in Business Management , value based Organisation , Trans –cultural Human values in Management. Swami Vivekananda's philosophy of Character Building, Gandhi's concept of Seven Sins, APJ Abdul Kalam view on role of parents and Teachers.	02
	Human Values and Present Practices – Issues : Corruption and Bribe , Privacy Policy in Web and Social Media, Cyber threats ,Online Shopping etc. Remedies UK Bribery Act, Introduction to sustainable policies and practices in Indian Economy.	02
	Principles of Ethics Secular and Spiritual Values in Management- Introduction- Secular and Spiritual values, features , Levels of value Implementation. Features of spiritual Values , Corporate Social Responsibility- Nature, Levels ,Phases and Models of CSR, Corporate Governance. CSR and Modern Business Tycoons Ratan Tata, Azim Premji and Bill Gates.	03
II	Holistic Approach in Decision making- Decision making, the decision making process , The Bhagavad Gita: Techniques in Management , Dharma and Holistic Management.	03
	Discussion through Dilemmas – Dilemmas in Marketing and Pharma Organisations, moving from Public to Private – monopoly context , Dilemma of privatisation, Dilemma on liberalization, Dilemma on social media and cyber security , Dilemma on Organic food , Dilemma on standardization ,Dilemma on Quality standards.	03
	Case Studies Dilemma on Quality standards.	02
III	Ecosystem: Concept, structure & functions of ecosystem : producer, consumer, decomposer, foodweb, food chain, energy flow, Ecological pyramids Conservation of Biodiversity- In-situ & Ex- situ conservation of biodiversity Role of individual in Pollution control Human Population & Environment Sustainable Development India and UN Sustainable Development Goals Concept of circular economy and entrepreneurship	7
IV	Environmental Laws? International Advancements in Environmental Conservation Role of National Green Tribunal Air Quality Index Importance of Indian Traditional knowledge on environment	8

	Bio assessment of Environmental Quality Environmental Management System Environmental Impact Assessment and Environmental Audit	
<p>Suggested Readings:</p> <ol style="list-style-type: none"> 1. A foundation course in Human Values and Professional Ethics by RR. Gaur, R. Sangal et.al 2. JUSTICE: What's the Right Thing to Do? Michael J. Sandel. 3. Human Values by A. N. Tripathi New Age International 4. Environmental Management by N.K. Uberoi 5. https://www.un.org/sustainabledevelopment/sustainable-development-goals/ 6. https://www.india.gov.in/my-government/schemes 7. https://www.legislation.gov.uk/ukpga/2010/23/contents 8. Daniel Kahneman, Thinking, Fast and Slow; Allen Lane Nov 2011 ISBN: 9780141918921 		
<p>Suggested Continuous Evaluation Methods:</p> <p>In addition to the theoretical inputs the course will be delivered through case studies and dilemmas. Assignments, Presentation, Group Discussions. This will instill in student a sense of decision making and practical learning. The course participants can be evaluated on the following structure.</p> <ul style="list-style-type: none"> ➤ Assignments (10) ➤ Presentation (10) ➤ Attendance (5) ➤ Final exam (75) 		



National Education Policy-2020
Common Minimum Syllabus for all U.P. State Universities
SUBJECT: Undergraduate Commerce (B.Com.)

Name	Designation	Affiliation
Steering Committee		
Mrs. Monika S. Garg, (I.A.S.), Chairperson Steering Committee	Additional Chief Secretary	Dept. of Higher Education U.P., Lucknow
Prof. Poonam Tandan	Professor, Dept. of Physics	Lucknow University, U.P.
Prof. Hare Krishna	Professor, Dept. of Statistics	CCS University Meerut, U.P.
Dr. Dinesh C. Sharma	Associate Professor	K.M. Govt. Girls P.G. College Badalpur, G.B. Nagar, U.P.
Supervisory Committee - Commerce		
Dr. Deepak Babu	Dean	Siddharth University, Kapilvastu, Siddharthnagar
Dr. Sanjeev Sharma	Associate Professor	St. Johns College, Agra
Dr. S.K.S. Yadav	Associate Professor	Meerut College, Meerut
Dr. Arvind Yadav	Assistant Professor	Km. M. Govt. Girls. (PG) College, Gautam Budha Nagar

Syllabus Developed by:

S. No.	Name	Designation	Department	College/ University
1	Dr. Deepak Babu	Dean	Faculty of Commerce	Siddharth University, Kapilvastu, Siddharthnagar
2	Dr. Sanjeev Sharma	Associate Professor	Commerce	St. Johns College, Agra
3	Dr. S.K.S. Yadav	Associate Professor	Commerce	Meerut College, Meerut
4	Dr. Arvind Yadav	Assistant Professor	Commerce	Km. M. Govt. Girls. (PG) College, Gautam Budha Nagar
5	Prof. S.K. Shukla	Ex Head	Commerce	MGKVP University, Varanasi
6	Prof. Nawab Ali Khan	Ex Dean	Commerce	Aligarh Muslim University, Aligarh
7	Dr. A. K. Misra	Principal	Commerce	S.S. (PG) College, Shahjahanpur
8	Dr. R. K. Jain	Ex Dean	Commerce	Dr. B R Ambedkar University, Agra
9	Dr. Pankaj Yadav	Assistant Professor	Commerce	K. A. (PG) College, Kasganj

Programme Outcomes

The career options for students pursuing B.Com. Programme is vast and candidates will always have interesting profiles to work at if they play to their strengths. While many B.Com. Graduates may choose the much tried and tested path of CA, CS, CMA and other related fields of study, one has ample opportunity to choose an out-of-the-box career option, as one in travel and hospitality, media and telecommunications depending on the path and degree one chooses.

Programme Specific Outcomes

Earning a graduate degree of commerce (B.Com.) is evidence of persistence, determination, intellectual prowess, and the ability to handle challenging environments all of which are sought-after qualities for individuals filling manager and director positions. An employee who has demonstrated success in a long-term situation that requires stamina, discipline, leadership, and the ability to work well with others is going to be in line for growth opportunities within his or her organization. B.Com. graduate after completion of course can choose to work in job profile option available to them depending on their caliber and interest area such as Accountant, Auditor, Consultant, Company Secretary, Business Analyst, Finance Officer, Sales Analyst, Junior Analyst, Tax Accountant, Stock Broker, Economist, and Business Development Trainee and so on to explore.

Year Wise Structure of Faculty of Commerce UG (B.Com.)

		Major 6 Credits Each	Major 6 Credits Each	Minor/ Elective 4/5/6 Credits	Minor Voc. 3 Credits	Minor Co- curricular 2 Credits	Major Industrial Training/ Survey/ Project 3/6 Credits	Credits	After Completion (Minimum Credits) (Max. Duration)				
Year	Sem.	Own Faculty	Any Faculty	Other Faculty	Vocat. Faculty	Co- curricular Course	Inter/Intra Faculty related to main Subject	Total					
1	I	1. Business Organization	Choose any one from the following-	1	1	1		27/28/29	Certificate in Commerce				
		2. Business Statistics	1. Business Communication										
			2. Introduction to Computer Application										
	II	1. Business Management	Choose any one from the following-					1		1	1		27/28/29
		2. Financial Accounting (4 Credit)	1. Essentials of E-commerce										
		3. Computerised Accounting (Practical)(2 Credit)	2. Business Economics										

2	III	1. Company Law	Choose any one from the following-	1	1		27/28/29	Diploma in Commerce					
		2. Cost accounting	1. Business Regulatory Framework										
			2. Inventory Management										
	IV	1. Income Tax Law and Accounts	Choose any one from the following-		1	1	27/28/29						
		2. Fundamentals of Marketing (4 Credit)	1. Fundamentals of Entrepreneurship										
		3. Digital Marketing (Practical) (2 Credit)	2. Tourism and Travel Management										
3	V	1. Corporate Accounting (5 Credit)			1	30 days Training or Survey where economic activities are involved	26	Bachelor Degree in Commerce					
		2. Goods and Services Tax (5 Credit)											
		Choose any two from the following-											
		1. Business Finance (5 Credit)											
		2. Principles and Practices of Insurance (5 Credit)											
		3. Monetary Theory and Banking in India (5 Credit)											
	VI	1. Accounting for Managers (5 Credit)									1	Project	26
		2. Auditing (5 Credit)											

		3. Comprehensive Viva (5 Credit)					
		Choose any one from the following-					
		1. Financial Institutions and Market (5 Credit)					
		2. Human Resource Management (5 Credit)					
		3. Business Ethics and Corporate Governance (5 Credit)					

Semester-wise Titles of the Papers in UG Commerce

(B.Com.)

Year	Sem.	Course Code	Paper Title	Theory/Practical	Credits
1	I	C010101T	Business Organisation	Theory	6
		C010102T	Business Statistics	Theory	6
		C010103T	Business Communication	Theory	6
		C010104T	Introduction to Computer Application	Theory	6
1	II	C010201T	Business Management	Theory	6
		C010202T	Financial Accounting	Theory	4
		C010203P	Computerised Accounting	Practical	2
		C010204T	Essentials of E-Commerce	Theory	6
		C010205T	Business Economics	Theory	6
2	III	C010301T	Company Law	Theory	6
		C010302T	Cost Accounting	Theory	6
		C010303T	Business Regulatory Framework	Theory	6
		C010304T	Inventory Management	Theory	6
2	IV	C010401T	Income Tax Law and Accounts	Theory	6
		C010402T	Fundamentals of Marketing	Theory	4
		C010403P	Digital Marketing	Practical	2
		C010404T	Fundamentals of Entrepreneurship	Theory	6
		C010405T	Tourism and Travel Management	Theory	6
3	V	C010501T	Corporate Accounting	Theory	5
		C010502T	Goods and Services Tax	Theory	5
		C010503T	Business Finance	Theory	5
		C010504T	Principles and Practices of Insurance	Theory	5
		C010505T	Monetary Theory and Banking in India	Theory	5
3	VI	C010601T	Accounting for Managers	Theory	5
		C010602T	Auditing	Theory	5
		C010603R	Comprehensive Viva	Viva	5
		C010604T	Financial Institutions and Market	Theory	5
		C010605T	Human Resource Management	Theory	5
		C010606T	Business Ethics and Corporate Governance	Theory	5

Programme: B.Com.	Year: First	Semester: First
Subject: Commerce		
Course Code: C010101T	Course Title: Business Organization	
<p>Course outcomes: After completing this course a student will have:</p> <ul style="list-style-type: none"> ✓ Ability to understand the concept of Business Organisation along with the basic laws and norms of Business Organisation. ✓ Ability to understand the terminologies associated with the field of Business Organisation along with their relevance. ✓ Ability to identify the appropriate types and functioning of Business Organisation for solving different problems. ✓ Ability to apply basic Business Organisation principles to solve business and industry related problems. ✓ Ability to understand the concept of Sole Proprietorship, Partnership and Joint Stock Company etc. 		
Credits: 6		Core Compulsory / Elective: Compulsory
Max. Marks: 25+75		Min. Passing Marks:10+25
Total No. of Lectures: 90		
Unit	Topics	No. of Lectures
I	Business: Concept, Meaning, Features, Stages of development of business and importance of business. Classification of Business Activities. Meaning, Characteristics, Importance and Objectives of Business Organization, Evolution of Business Organisation. Difference between Industry and Commerce and Business and Profession, Modern Business and their Characteristics.	22
II	Promotion of Business: Considerations in Establishing New Business. Qualities of a Successful Businessman. Forms of Business Organisation: Sole Proprietorship, Partnership, Joint Stock Companies & Co-operatives and their Characteristics, relative merits and demerits, Difference between Private and Public Company, Concept of One Person Company.	23
III	Plant Location: Concept, Meaning, Importance, Factors Affecting Plant Location. Alfred Weber's and Sargent Florence's Theories of Location. Plant Layout –: Meaning, Objectives, Importance, Types and Principles of Layout. Factors Affecting Layout. Size of Business Unit–: Criteria for Measuring the Size and Factors Affecting the Size. Optimum Size and factors determining the Optimum Size.	25

IV	Business Combination: Meaning, Characteristics, Objectives, Causes, Forms and Kinds of Business Combination. Rationalisation: Meaning, Characteristics, Objectives, Principles, Merits and demerits, Difference between Rationalisation and Nationalisation.	20
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Suggested Readings:

1. Gupta, C.B., “Business Organisation”, Mayur Publication, (2014).
2. Singh, B.P., Chhabra, T.N., “An Introduction to Business Organisation & Management”, Kitab Mahal, (2014).
3. Sherlekar, S.A. & Sherlekar, V.S, “Modern Business Organization & Management Systems Approach Mumbai”, Himalaya Publishing House, (2000).
4. Bhusan Y. K., “Business Organization”, Sultan Chand & Sons.
5. Prakash, Jagdish, “Business Organistaton and Management”, Kitab Mahal Publishers (Hindi and English)

Note: Latest edition of the text books should be used.

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: First	Semester: First
Subject: Commerce		
Course Code: C010102T	Course Title: Business Statistics	
Course outcomes: The purpose of this paper is to inculcate and analytical ability among the students.		
Credits: 6	Core Compulsory / Elective: Compulsory	
Max. Marks: 25+75	Min. Passing Marks:10+25	
Total No. of Lectures: 90		
Unit	Topics	No. of Lectures
I	Indian Statistics: Meaning, About father of Indian Statistics (Prof. Prasanta Chandra Mahalanobis). Introduction to Statistics: Meaning, Scope, Importance and Limitation, Statistical Investigation- Planning and organization, Statistical units, Methods of Investigation, Census and Sampling. Collection of Data- Primary and Secondary Data, Editing of Data Classification of data, Frequency Distribution and Statistical Series, Tabulation of Data Diagrammatical and Graphical Presentation of Data.	20
II	Measures of Central Tendency – Mean, Median, Mode, Geometric and Harmonic Mean; Dispersion – Range, Quartile, Percentile, Quartile Deviation, Mean Deviation, Standard Deviation and its Co- efficient, Co-efficient of Variation and Variance, Test of Skewness and Dispersion, Its Importance, Co-efficient of Skewness.	25
III	Correlation- Meaning, application, types and degree of correlation, Methods- Scatter Diagram, Karl Pearson’s Coefficient of Correlation, Spearman’s Rank Coefficient of Correlation.	25
IV	Index Number: - Meaning, Types and Uses, Methods of constructing Price Index Number, Fixed – Base Method, Chain-Base Method, Base conversion, Base shifting deflating and splicing. Consumer Price Index Number, Fisher’s Ideal Index Number, Reversibility Test- Time and Factor; Analysis of Time Series: -Meaning, Importance and Components of a Time Series. Decomposition of Time Series: - Moving Average Method and Method of Least square.	20
Suggested Readings:		
<ol style="list-style-type: none"> 1. Heinz, Kohler: Statistics for Business & Economics, HarperCollins; 2. Gupta, S.C. Fundamental of Statistics, Himalaya Publication. 3. Sharma J.K., Business Statistics, Pearson Education. 		

4. Gupta S.P. & Gupta Archana, Elementary Statistics, (English and Hindi) Sultan Chand & Sons, New Delhi.

Note: **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: First	Semester: First
Subject: Commerce		
Course Code: C010103T	Course Title: Business Communication	
Course outcomes: To acquire skills in reading, writing, comprehension and communication, and also to use electronic media for business communication.		
Credits: 6		Core Compulsory / Elective: Elective
Max. Marks: 25+75		Min. Passing Marks: 10+25
Total No. of Lectures: 90		
Unit	Topics	No. of Lectures
I	<p>Introduction</p> <p>Process and Importance of Communication, Types of Communication (verbal & Non Verbal), Different forms of Communication. Barriers to Communication: Linguistic Barriers, Psychological Barriers, Interpersonal Barriers, Cultural Barriers, Physical Barriers, Organizational Barriers. Role, effects and advantages of technology in Business Communication like email, text messaging, instant messaging and modern techniques like video conferencing, social</p>	22

	networking. Strategic importance of e-communication.	
II	NON-Verbal Aspects of Communicating: Body Language, Kinesics, Proxemics, Paralanguage. Effective Listening: Principles of Effective listening, Factors affecting listening exercises, Oral, Written and video sessions, Interviewing skills: Appearing in interviews, Writing resume and letter of application. Modern forms of communicating: E-Mail, Video Conferencing etc.	21
III	Business language and presentation Importance of Business language, Vocabulary Words often confused Words often misspelt, Common errors in English. Oral Presentation Importance, Characteristics, Presentation Plan, Power point presentation, Visual aids. Writing skills: Planning business messages, Rewriting and editing, The first draft and Reconstructing the final draft. Office Correspondence: Official Letter, Semi Official Letter And Memorandum.	31
IV	Report Writing Identify the types of reports, define the basic format of a report, identify the steps of report writing, write a report meeting the format requirements, determine the process of writing a report, importance of including visuals such as tables, diagrams and charts in writing report, apply citation rules (APA style documentation) in reports.	16

Suggested Readings:

1. Lesikar, R.V. & Flatley, M.E.; Basic Business Communication Skills for Empowering the Internet Generation, Tata McGraw Hill Publishing Company Ltd. New Delhi.
2. Bovee, and Thill, Business Communication Today, Pearson Education
3. Shirley, Taylor, Communication for Business, Pearson Education
4. Locker and Kaczmarek, Business Communication: Building Critical Skills, TMH
5. Misra, A.K., Business Communication (Hindi), Sahitya Bhawan Publications Agra

Note- Latest edition of the text books should be used.

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behavior, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: First	Semester: First
Subject: Commerce		
Course Code: C010104T	Course Title: Introduction to Computer Application	
Course outcomes: The objective of this course is to provide basic knowledge of computer, DBMS, data base language and word processing.		
Credits: 6	Core Compulsory / Elective: Elective	
Max. Marks: 25+75	Min. Passing Marks: 10+25	
Total No. of Lectures: 90		
Unit	Topics	No. of Lectures
I	Computer: An Introduction- Computer in Business, Elements of Computer System Set-up; Indian computing Environment, components of a computer system, Generations of computer and computer languages; Software PC- Software packages-An introduction, Disk Operating system and windows: Number systems and codes.	22
II	Relevance of Data Base Management Systems and Interpretations of Applications; DBMS system Network, Hierarchical and relational database, application of DBMS systems.	21
III	Data Base Language, dbase package, Basics of data processing; Data Hierarchy and Data file structure, Data files organizations; Master and Transaction file. Programme development cycle, Management of data, processing systems in Business organization.	25
IV	Word processing: Meaning and role of word processing in creating of document, Editing, formatting and printing document using tools such as spelling checks,	22

Suggested Readings:

1. Gill, N. S, "Handbook of Computer Fundamentals", Khanna Publishing House, Delhi
2. Shrivastava" Fundamental of Computer& Information Systems" (Wiley Dreamtech)
3. Leon A and Leon M ., " Introduction to Computers" (Vikas, 1st Edition).
4. R.S. Salaria, "Computer Fundamentals", Khanna Publishing House, Delhi.
5. Norton P., "Introduction to Computers", (TATA McGraw Hill)
6. Leon "Fundamentals of Information Technology", (Vikas)
7. Ravichandran, A., "Computers Today", Khanna Publishing House, Delhi.
8. Sinha, P.K., "Computer Fundamental", BPB Publications (Hindi and English)
9. Laudon & Laudon, "Management Information System"

Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: **B.Com.**

Year: **First**

Semester: **Second**

Subject: **Commerce**

Course Code: **C010201T**

Course Title: **Business Management**

Course outcomes:

After completing this course a student will have:

- ✓ Ability to understand the concept of Business Management along with the basic laws and norms of Business Management.
- ✓ Ability to understand the terminologies associated with the field of Business Management and control along with their relevance.

<p>✓ Ability to identify the appropriate method and techniques of Business Management for solving different problems.</p> <p>✓ Ability to apply basic Business Management principles to solve business and industry related problems.</p> <p>Ability to understand the concept of Planning, Organising, Direction, Motivation and Control etc.</p>		
Credits: 6		Core Compulsory / Elective: Compulsory
Max. Marks: 25+75		Min. Passing Marks:10+25
Total No. of Lectures: 90		
Unit	Topics	No. of Lectures
I	Discuss the Management Practices in Indian “Vedas”. Introduction: Concept, Characteristics, Nature, Process and Significance of Management; Managerial Roles (Mintzberg); An overview of functional areas of Management; Development of Management Thought; Classical and Neo Classical System; Contingency Approach, System Approach.	24
II	Planning: Concept, Characteristics, Process, Importance and Types, Criteria of effective planning. Decision-Making: Concept, Process, Types and Importance. Management by Objectives. Organisation: Concept, Nature, Process and Significance. Authority and Responsibility Relationships. Centralization and Decentralization. Departmentation. Organizational Structure- Forms.	24
III	Direction: Concept and Techniques, Coordination as an Essence of Management, Communication- Nature, Process, Importance, Types, Networks and Barriers. Effective Communication. Management of Change: Concept, Nature , Types of Changes and Process of Planned Change, Resistance to Change and methods of reducing resistance to change.	21
IV	Controlling: Meaning, Importance and Process, Effective Control System. Techniques of Control. Motivation- Concept, Types, Importance, Theories- Maslow, Herzberg, McGregor, Ouchi, Financial and Non-Financial Incentives. Leadership: Meaning, Concept, Functions and Leadership styles, Likert’s Four System of Leadership.	21
<p>Suggested Readings:</p> <ol style="list-style-type: none"> 1. Gupta, C.B., “Business Organisation”, Mayur Publication, (2014). 2. Singh, B.P., Chhabra, T.N., “An Introduction to Business Organisation & Management”, Kitab Mahal, (2014). 3. Sherlekar, S.A. and Sherlekar, V.S, “Modern Business Organization & Management Systems Approach Mumbai”, Himalaya Publishing House, (2000). 		

4. Bhusan Y. K., "Business Organization", Sultan Chand & Sons, (1970).
 5. Jagdish Prakash, "Business Organization and Management", Kitab Mahal publishers, (1997).
 6. Agarwal K.K., "Business Organisation and Management".
 7. Joshi, G.L., "Vyavasayik Sanghathan Evam Prabandha".
 8. Prasad, Jagdish, "Vyavasayik Sanghathan Evam Prabandha".
 9. Shukla, Sudhir, "Vyavasayik Sanghathan Evam Prabandha".
 10. Shukla, Sudhir, "Management Concept & Principles".
 11. Yadav, Pankaj, Business Management, Neel Kamal Prakashan, Delehi
- Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:
Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: First	Semester: Second
Subject: Commerce		
Course Code: C010202T	Course Title: Financial Accounting	
Course outcomes: The objective of this paper is to help students to acquire conceptual knowledge of fundamentals of accounting and to impart skills for recording various kinds of business transactions.		
Credits: 4		Core Compulsory / Elective: Compulsory
Max. Marks:		Min. Passing Marks:
Total No. of Lectures: 60		
Unit	Topics	No. of Lectures
I	Shri Kalyan Subramani Aiyar (K.S. Aiyar) 1859-1940 known as father of Accountancy in India. Nature and scope of Accounting, Generally Accepted Accounting Principles: Concepts and Conventions, Indian and International Accounting Standards. Accounting Mechanics: Double Entry System,	12

	Preparation of Journal, Ledger and Trial Balance, Profit and Loss A/c, Balance Sheet, Concept of Income and its Measurement.	
II	<p>Royalty Accounts - Accounting Records for Royalty in the books of Landlords and Lessee, Recoupment of Shortworking, Sub - lease, Short working Reserve Account, Nazarana.</p> <p>Hire Purchase Account - Accounting Records in the Books of Hire Purchaser and Vendor, Different Methods of Calculation of Interest and Cash Price, Maintenance of Suspense Account, Payment of Premium, Default in Payment and Partial Returns of Goods.</p> <p>Installment Payment System - Difference between Hire Purchase and Installment Payment System. Accounting Records in the book of Purchaser & Vendor, Interest suspense account.</p>	15
III	<p>Departmental Accounts - Meaning, Objects and Importance, Advantage, Methods of Departmental Accounts, Final Accounts of Non Corporate Departmental Business, Allocation of Indirect Expenses.</p> <p>Branch Accounts - Meaning and Objectives of Branch Account, Importance and Advantages, Classification of Branches, Accounting of Branch Accounts under various Methods.</p>	15
IV	<p>Insolvency Accounts- Meaning, Circumstances of Insolvency, Procedure of Declaring Insolvency, Preparation of Statement of Affairs and Deficiency Account.</p> <p>Voyage Accounts - Meaning & Preparation of Voyage Accounts.</p>	18

Suggested Readings:

1. Jain & Naranag, "Advanced Accounts", Jain Book Agency, 18th Edition, Reprint (2014)
2. Jaisawal, K.S., Financial Accounting, (Both in Hindi & English Version), Vaibhav Laxmi Prakashan. (2010)
3. Gupta, R. L. & Radhaswamy, M., Financial Accounting: Sultan Chand and sons.
4. Shukla, M.C., Grewal T.S. & Gupta, S.C., Advanced Accounts: S. Chand & Co.
5. Maheshwari S.N. & Maheshwari S. K, "A text book of Accounting for Management", Vikas Publication, 10th Edition (2013)
6. Shukla, S..M., Financial Accounting, Edition: 51st, Sahitya Bhawan Publications, 2017
7. Gupta. R.L and Shukla, M.C., "Principles of Accountancy", S. Chand & Company Ltd., (2011)
8. Arulanandam, M.A. & Raman, K.S., "Advanced Accounting", Vikas Publishers, (2010).

9. Shukla, M.C., “Advanced Accounting”, Sultan Chand & Sons, (2010)
 10. Babu, Deepak, Financial accounting, Navyug Sahitya Sadan, Agra
 Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:
Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: First	Semester: Second
Subject: Commerce		
Course Code: C010203P	Course Title: Computerised Accounting (Practical)	
Course outcomes: The purpose of this paper is provide to knowledge of accounting with computer.		
Credits: 2	Core Compulsory / Elective: Compulsory	
Max. Marks:	Min. Passing Marks:	
Total No. of Practical Labs: 30		
Unit	Topics	No. of Hours
I	Accounting- Concept, Objectives, Advantages And Limitations, Types Of Accounting Information; Users Of Accounting Information And Their Needs. Qualitative Characteristics Of Accounting Information. Role Of Accounting In Business.	4
II	Introduction To Computer And Accounting Information System {AIS}: (A) Introduction To Computers (Elements, Capabilities, Limitations Of Computer System). (B)Introduction To Operating Software, Utility Software And Application Software. Introduction To	4

	Accounting Information System (AIS) As A Part Of Management Information System.	
III	Computerised Accounting Systems: Computerized Accounts by using any popular accounting software: Creating a Company; Configure and Features settings; Creating Accounting Ledgers and Groups; Creating Stock Items and Groups; Vouchers Entry; Generating Reports - Cash Book, Ledger Accounts, Trial Balance, Profit and Loss Account, Balance Sheet, Funds Flow Statement, Cash Flow Statement Selecting and shutting a Company; Backup and Restore data of a Company.	22

Suggested Readings:

1. Computerized Accounting System For B.Com. by Ajay Sharma and Manoj Bansal
2. Computerized Accounting System by Neeraj Goyal and Rohit Sachdeva
3. Computer Based Accounting by C Mohan Luneja, Sandeep Bansal and Rama Bansal
4. Robert N Anthony, David Hawkins, Kenneth A. Merchant, *Accounting: Text and Cases*. McGraw- Hill Education, 13th Ed. 2013.
5. Charles T. Horngren and Donna Philbrick, *Introduction to Financial Accounting*, Pearson Education.
6. J.R. Monga, *Financial Accounting: Concepts and Applications*. Mayur Paper Backs, New Delhi.
7. M.C.Shukla, T.S. Grewal and S.C.Gupta. *Advanced Accounts. Vol.-I*. S. Chand & Co., New Delhi.
8. S.N. Maheshwari, and. S. K. Maheshwari. *Financial Accounting*. Vikas Publishing House, New Delhi.
9. Deepak Sehgal. *Financial Accounting*. Vikas Publishing H House, New Delhi.
10. Bhushan Kumar Goyal and HN Tiwari, *Financial Accounting*, International Book House
11. Goldwin, Alderman and Sanyal, *Financial Accounting*, Cengage Learning.
12. Tulsian, P.C. *Financial Accounting*, Pearson Education.

Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)

Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)
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Programme: B.Com.	Year: First	Semester: Second
Subject: Commerce		
Course Code: C010204T	Course Title: Essentials of E-commerce	
Course outcomes: This course is to familiarize the student with the basics of e-commerce and to comprehend its potential.		
Credits: 6	Core Compulsory / Elective: Elective	
Max. Marks: 25+75	Min. Passing Marks:10+25	

Total No. of Lectures: **90**

Unit	Topics	No. of Lectures
I	Internet and Commerce: Business Operations in Commerce Practices Vs Traditional Business Practices; Benefits of E-Commerce to Organization, Consumers, And Society; Limitation of E-Commerce.	20
II	Application in B2C: Consumers Shopping Procedure on The Internet; Products in B2C Model; E-Brokers; Broker- Based Service Online; Online Travel Tourism Services; Benefits and Impact of E-Commerce on Travel Industry, Online Stock Trading and Its Benefits; Online Banking and Its Benefit; Online Financial Services and its Future.	25
III	Application in B2B: Applications of B2B; Key Technologies for B2B, Characteristics of The Supplier Oriented Marketplace, Buyer Oriented Marketplace and Intermediate Oriented Marketplace; Just in Time Delivery in B2B.	30
IV	Applications in Governance: EDI In Governance; E Government; E Governance Applications Of The Internet, Concept Of Government-To-Business, Business-To-Government And Citizen-To-Government; E-Governance Models; Private Sector Interface In E Governance.	15

Suggested Readings:

1. Pt Joseph Of E-Commerce Are Indian Perspective Php Learning Private Limited
2. Nidhi Dhawan Introduction To E-Commerce International Book House Private Limited
3. Agarwal Kamlesh And And Agarwal Diksha Bridge To The Online To A Front New Delhi India Macmillan India (Hindi and English)
4. Manali- Danielle Internet And Internet Engineering Tata Mcgraw-Hill New

Delhi

5. Pandey- Concept Of E-Commerce, S.K. Kataria And Sons(Hindi and English)

Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: First	Semester: Second
Subject: Commerce		
Course Code: C010205T	Course Title: Business Economics	
Course outcomes: Business Economics objective this course is meant to acquaint the students with the principles of Business Economics as are applicable in business.		
Credits: 6	Core Compulsory / Elective: Elective	
Max. Marks: 25+75	Min. Passing Marks:10+25	
Total No. of Lectures: 90		
Unit	Topics	No. of Lectures
I	Famous Economist of India like- Kautilya, Gopal Krishna Gokhale, D.R. Gadgil, Dr. Ram Manohar Lohia, Jawaharlal Nehru and Dr. B.R. Ambedkar etc. Introduction: Nature And Scope Of Business Economics, Meaning, Kinds, Law Of Demand, Law Of Marginal Diminishing Utility, Elasticity Of Demand, Concept And Measurement Of Elasticity Of Demand Price, Incoming Cross, Elasticity Determinants Of Elasticity Of Demand Importance Of Elasticity Of Demand.	22
II	Theory Of Cost: Short Run And Long Run Cost Curve Traditional And Modern Approaches. Production	31

	Function: Law Of Variable Proportion; Properties Ride Line, Optimum Factor Combination And Expansion Path; Return To Scale; Internal And External Economics And Diseconomies.	
III	A. Perfect Competition: Meaning, Price And Output Determination. B. Monopoly: Meaning And Determination Of Price Under Monopoly; Equilibrium Of A Firm/Industry. C. Monopolistic Competition: Meaning And Characteristics; Price And Output Determination Under Monopolistic Competition.	21
IV	Business Cycle: Various Phases And Its Causes; Theory Of Distribution: Marginal Productivity Theory Of Modern Theory, Wage- Meaning, Determination Of Wage Rate Under Perfect Competition And Monopoly, Rent Concept: Modern Theories Of Rent: Interest Concept- And Theories Of Interest Profit- Concept And Theories Of Profit.	16

Suggested Readings:

1. Geetika, “Managerial Economics”, McGraw-Hill Education 2nd Ed.
2. Thomas & Maurice, “Managerial Economics: Concepts and Applications” (SIE), , McGraw Hill Education, 9th Ed
3. Ahuja, H.L, “Managerial Economics”, S.Chand, 8th Ed
4. Dwivedi, D.N., “Managerial Economics”, Vikas Publication, 7th Ed
5. Mithani, D.M., “Managerial Economics- Theory and Applications”, Himalaya Publications
6. Gupta, G., “Managerial Economics”, McGraw-Hill Education (India)Pvt Limited
7. Seth, M.L., “Principles of Economics”, Lakshmi Narain Agrawal Educational Publishers, Agra
8. Vaish & Sunderm, “Principles of Economics”, Ratan Prakashan Mandir
9. Jhingan, M.L., “Managerial Economics -1E”, Vrinda Pub
10. Jhingan, M.L., Vyashthi Arthashastra, Vrinda Pub 11. Mishra, J.P., Vyashthi Arthashastra

Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)

Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)
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Programme: B.Com.	Year: Second	Semester: Third
Subject: Commerce		
Course Code: C010301T	Course Title: Company Law	
Course outcomes: The objective of this course is to provide basic knowledge of the provisions of the Companies Act 2013 along with relevant cases.		
Credits: 6	Core Compulsory / Elective: Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 10+25	

Total No. of Lectures: **90**

Unit	Topics	No. of Lectures
I	Indian Companies Act 2013: Nature And Types Of Companies, Conversion Of Public Companies Into Private Company's And Vice Versa. Formation, Promotion And Incorporation Of Companies, Memorandum Of Association; Article Of Association; Prospectus.	22
II	Shares: Types, Share Capital-Kinds; Allotment Of Shares; Members – Categories, Modes Of Acquiring Membership, Rights And Liabilities; Transfer And Transmission- Difference, Methods Of Borrowing, Debentures, Mortgages And Charges - Fixed And Floating.	22
III	Management: Directors, Types And Number Of Directors, Managing Director, Whole Time Director – Appointment, Qualifications And Disqualification, Duties, Vacation, Resignation And Removal, Company Meetings- Kinds, Quorum, Voting, Resolution, Minutes.	25
IV	Majority Powers And Minority Rights: Protection Of Minority Rights; Prevention Of Oppression And Management. Mismanagement, Winding Up-Kinds And Conduct-Petition For Winding Up, Appointment Of Official Liquidator And Duties.	21

Suggested Readings:

1. Kapoor GK A Dhamija Sanjay Company Law Comprehensive Textbook On Companies Act 2013 Taxmann Publication
 2. Singh Avtar Company Law Delhi India Eastern Book Company Bharat Law House
 3. Gupta Company Adhinyam Sahitya Bhawan Publication (Hindi and English)
 4. Maheshwari SN And SK Maheshwari A Manual Of Business Law 2nd Edition Himalaya Publishing House
- Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:
Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: Second	Semester: Third
Subject: Commerce		
Course Code: C010302T	Course Title: Cost Accounting	
Course outcomes: This course exposes the students to the basic concepts and the tools used in cost accounting.		
Credits: 6		Core Compulsory / Elective: Compulsory
Max. Marks: 25+75		Min. Passing Marks: 10+25
Total No. of Lectures: 90		
Unit	Topics	No. of Lectures
I	Introduction: Nature, Scope and Advantages of Cost Accounting, Installation of Costing System, Difference between Cost and Financial Accounting, Classification of Costs. Material: Purchase, Storage and Control of Material, Stock Levels, Inventory, Control Techniques.	20

	Methods of Pricing Material Issues.	
II	Labour: Meaning and Components of Labour Cost. Concept, Accounting and Control of Idle time and Overtime. Methods of Wage Payment and Incentive Plans, Labour Turnover. Overheads: Collection, Classification, Allocation, Apportionment and Absorption of Overheads (Primary and Secondary Distribution), Machine Hour Rate.	20
III	Unit Output Costing: Concept of and Need for Unit Output Costing; Preparation of Cost Sheet and Tender Price; Preparation of Reconciliation Statement.	30
IV	Process Costing: Preparation of Process Accounts; Treatment of Normal and Abnormal Wastage; Treatment of Joint Product and By-product; Contract Costing: Preparation of Contract Account, Determination of Profit on Completed and Uncompleted Contracts; Operating Costing.	20

Suggested Readings:

1. Jain S.P. and Narang K.L: Cost Accounting; Kalyani New Delhi.
2. Maheshwari S.N: Advanced Problems and Solutions in Cost Accounting; Sultan Chand, New Delhi. (Hindi and English)
3. Tulsian P.C; Practical Costing: Vikas, New Delhi.
4. Garg A. K.; Cost Accounting: An Analytical Study, Swati Publication, Meerut.
5. Horngren, Charles, Foster and Datar: Cost Accounting - A Managerial Emphasis; Prentice-Hall of India, New Delhi.

Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: Second	Semester: Third
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Subject: Commerce		
Course Code: C010303T	Course Title: Business Regulatory Framework	
Course outcomes: The objective of this course is to provide a brief idea about the framework of Indian Contract Act,1872 and Sale of Goods Act,1930.		
Credits: 6	Core Compulsory / Elective: Elective	
Max. Marks: 25+75	Min. Passing Marks:10+25	
Total No. of Lectures: 90		
Unit	Topics	No. of Lectures
I	Indian Contract Act, 1872: Definition & Nature of Contract, Classification; Offer & Acceptance; Capacity of Parties; Free Consent; Consideration; Legality of Objects	20
II	Void Agreements; Performance of Contracts; Discharge of Contract; Contingent Contracts; Quasi Contracts; Remedies for Breach of Contract, Special Contracts: Indemnity & Guarantee; Bailment & Pledge; Contract of Agency.	24
III	Sale of Goods Act, 1930: Contract of Sale of Goods, Conditions & Warranties; Transfer of Ownership; Performance of the Contract: Remedial Measures; Auction able Claims.	25
IV	Negotiable Instrument Act: Cheque, Promissory Note, Bill of Exchange, Crossing of Cheque, Dishonour of Cheque, Payment in due Course.	21
Suggested Readings: <ol style="list-style-type: none"> 1. Kuchal M.C: Business Law; Vikas Publishing House, New Delhi. 2. Chandha P.R: Business Law; Galgotia, New Delhi. 3. Kapoor N.D: Business Law; Sultan Chand & Sons, New Delhi. (Hindi and English) 4. Desai T.R.: Indian Contract Act, Sale of Goods Act and Partnership Act; S.C. Sarkar & Sons Pvt. Ltd., Kolkata. 5. Tulsian, P.C., Business Law, New Delhi, Tata McGraw Hill. 6. Sharma, Sanjeev, Business Regulatory Framework, Jawahar Publication, Agra <p>Note- Latest edition of the text books should be used.</p>		
This course can be opted as an elective by the students of following subjects: Open for all		
Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:		
Assessment and Presentation of Assignment	(04 marks)	
Class Test-I (Objective Questions)	(04 marks)	
Class Test-II (Descriptive Questions)	(04 marks)	
Class Test-III (Objective Questions)	(04 marks)	

Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: Second	Semester: Third
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Subject: Commerce		
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Course Code: C010304T	Course Title: Inventory Management
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<p>Course outcomes: After completing this course a student will have:</p> <ul style="list-style-type: none"> ✓ Ability to understand the concept of Inventory Management along with the basic laws and axioms of Inventory Management. ✓ Ability to understand the terminologies associated with the field of Inventory management and control along with their relevance. ✓ Ability to identify the appropriate method and techniques of Inventory management for solving different problems. ✓ Ability to apply basic Inventory management principles to solve business and industry related problems. <p>Ability to understand the concept of Working Capital Management, Demand Analysis and Obsolescence.</p>
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Credits: 6	Core Compulsory / Elective: Elective
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Max. Marks: 25+75	Min. Passing Marks: 10+25
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Total No. of Lectures: 90	
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Unit	Topics	No. of Lectures
I	Inventory Management: Concept, meaning, Inventory Management Process, Why inventory management is important? Principles of Inventory Management, How to improve inventory management, perpetual inventory system, what are inventory costs, Role of Inventory Management, Methods of Inventory Management, Benefits of good Inventory Management.	22
II	Concept and Valuation of Inventory: Concept and Objectives of Inventory, Need for holding Inventory, Planning and controlling Inventory levels, Effects of excess inventory on business, Product Classification, Product Coding, Lead Time, Replenishment Methods.	26

III	Management of Working Capital: Concept, Meaning, Classification, Factors determining Working Capital requirements, Sources of Working Capital, Need of Working Capital, Working Capital Ratio- current ratio, quick ratio, absolute liquid ratio, cash ratio and working capital turnover ratio.	24
IV	Inventory Control: Concept and Meaning of Inventory Control, Objectives and Importance and Essentials of Inventory Control, Types of Inventory, Techniques of Inventory Control – EOQ, ROP, ABC, VED, JIT, Determination of Inventory levels, Impact of Inventory Inaccuracy, Disposal of Obsolete and Scrap items, Reasons for Obsolescence, Control of Obsolescence, Control of Scrap.	18

Suggested Readings:

1. Muller M. (2011), Essentials of Inventory Management, AMACON.
2. Narayan P. (2008), Inventory Management, Excel Books.
3. Gopalkrishnan P. (1977), Materials Management, PHI Learning Pvt. Ltd.
4. Chitale A.K. & Gupta R.C. (2014), Materials Management, PHI Learning Pvt. Ltd.
5. Chapman Stephen (2017), Introduction to Materials Management, Pearson Publishing.

Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: Second	Semester: Fourth
Subject: Commerce		
Course Code: C010401T	Course Title: Income Tax Law and Accounts	
Course outcomes: It enables the students to know the basics of Income Tax Act and its implications.		
Credits: 6	Core Compulsory / Elective: Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 10+25	
Total No. of Lectures: 90		
Unit	Topics	No. of Lectures
I	Taxation Policy of Raja Todarmal. Introduction, Important Definitions: Assessee, Person, Income, Total Income, Assessment Year & Previous Year. Agricultural Income & its assessment. Residence & Tax Liability (Basis of Charge). Capital & Revenue. Exempted Incomes.	22
II	Income from Salaries, Income from House Property. Profits and Gains of Business and Profession, Depreciation.	31
III	Capital gains, Income from Other Sources, Deductions from Gross Total Income, Computation of Tax Liability of an Individual.	21
IV	Set off and carry forward of losses and Clubbing of Income, Procedure of Assessment and Income Tax Authorities, Advance Payment of Tax and Deduction of Tax at Source.	16
Suggested Readings: <ol style="list-style-type: none"> 1. Singhanai V.K: Students' Guide to Income Tax; Taxmann, Delhi. 2. Mehrotra H.C: Income Tax Law & Accounts; Sahitya Bhawan, Agra. (Hindi and English) 3. Girish Ahuja and Ravi Gupta: Systematic approach to income tax; Sahitya Bhawan Publications, New Delhi. (Hindi and English) 4. Jain, R.K., Income Tax Law and Accounts (Hindi and English), SBPD Publications, Agra <p>Note- Latest edition of the text books should be used.</p>		
This course can be opted as an elective by the students of following subjects: Open for all		
Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:		
Assessment and Presentation of Assignment	(04 marks)	
Class Test-I (Objective Questions)	(04 marks)	

Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: Second	Semester: Fourth
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Subject: Commerce

Course Code: C010402T	Course Title: Fundamentals of Marketing
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Course outcomes: The objective of this course is to provide basic knowledge of concepts, principles, tools and techniques of marketing.

Credits: 4	Core Compulsory / Elective: Compulsory
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Max. Marks:	Min. Passing Marks:
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Total No. of Lectures: **60**

Unit	Topics	No. of Lectures
I	Introduction: Nature, scope and importance of marketing; Evolution of marketing concepts; Marketing mix; Marketing environment. Micro and Macro environmental factors. Consumer Behaviour – An Overview: Consumer buying process; Factors influencing consumer buying decisions.	15
II	Market Selection: Market segmentation – concept, importance and bases; Target market selection; Positioning concept, importance and bases; Product differentiation vs. market segmentation. Product: Meaning and importance. Product classifications; Concept of product mix; Branding, packaging and labelling; After-sales services; Product life-cycle; New Product Development.	15
III	Pricing: Significance; Factors affecting price of a product; Major pricing methods; Pricing policies and strategies. Promotion: Nature and importance of promotion; Promotion Tools: advertising, personal selling, public relations; sales promotion and publicity – concept and their distinctive characteristics; Promotion mix; Factors affecting promotion mix decisions; and Integrated Marketing Communication Approach.	15

IV	<p>Distribution: Channels of distribution - meaning and importance; Types of distribution channels; Wholesaling and retailing; Factors affecting choice of distribution channel; Distribution Logistics; Meaning, importance and decisions.</p> <p>Retailing: Types of retailing – store based and non-store based retailing, chain stores, specialty stores, supermarkets, retail vending machines, mail order houses, retail cooperatives; Management of retailing operations: an overview; Retailing in India: changing scenario.</p> <p>Recent developments in marketing: Social Marketing, Online Marketing, Direct Marketing, Services Marketing, Green Marketing, Relationship Marketing, Rural marketing.</p>	15
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Suggested Readings:

1. Kotler, Philip; Keller, Kevin Lane; Koshy, Abraham, and Mithileshwar Jha, Marketing Management: A South Asian Perspective, Pearson Education.
 2. Palmer, Adrian, Introduction to Marketing, Oxford University Press, UK
 3. Lamb, Charles W.; Hair, Joseph F., and Carl McDaniel, Principles of Marketing, South Western Publishing, Ohio
 4. Chhabra, T.N., Principles of Marketing, Sun India Publication.
 5. Kumar, Arun & N. Meenakshi, Marketing Management, Vikas Publications. (Hindi and English)
 6. McCarthy, E. Jerome., and William D. Perreault, Basic Marketing, Richard D. Irwin.
 7. Pride, William M., and D.C. Ferrell, Marketing: Planning, Implementation & Control, Cengage Learning.
 8. Majaro, Simon, The Essence of Marketing, Prentice Hall, New Delhi.
 9. Zikmund, William G. and Michael D'Amico, Marketing: Creating and Keeping Customers in an E-Commerce World, Thomson Learning.
 10. Etzel, Michael J., Walker, Bruce J., Staton, William J., and Ajay Pandit, Marketing Concepts and Cases, Tata McGraw Hill (Special Indian Edition).
 11. McCarthy, E. Jerome; Cannon, Joseph P., and William D. Perrault, Jr., Basic Marketing: A Managerial Approach, McGraw Hills.
- Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: Second	Semester: Fourth
Subject: Commerce		
Course Code: C010403P	Course Title: Digital Marketing (Practical)	

Course Outcomes:

After completing this course a student will have:

- ✓ Ability to understand the concept of Digital Marketing along with the basic forms and norms of Digital Marketing.
- ✓ Ability to understand the terminologies associated with the field of Digital Marketing and control along with their relevance.
- ✓ Ability to identify the appropriate method and techniques of Digital Marketing for solving different problems.
- ✓ Ability to apply basic Digital Marketing principles to solve business and industry related issues and problems.
- ✓ Ability to understand the concept of Budgetary Control, Cash Flow Statement, Fund Flow Statement, Break Even Analysis etc.

Credits: 2	Core Compulsory / Elective: Compulsory
Max. Marks:	Min. Passing Marks:

Total No. of Practical Labs: **30**

Unit	Topics	No. of Hours
I	Introduction of the digital marketing, Digital vs. Real Marketing, Digital Marketing Channels, Creating initial digital marketing plan, Content management, SWOT analysis, Target group analysis.	4
II	Web design, Optimization of Web sites, MS Expression Web, Creating web sites, SEO Optimization, Writing	6

	the SEO content, Writing the SEO content, Google Ad Words- creating accounts, Google Ad Words- types.	
III	Introduction to CRM, CRM platform, CRM models, CRM strategy, Introduction to Web analytics, Web analytics – levels, Introduction of Social Media Marketing, Social Media Marketing plan, Facebook Ads, Creating Facebook Ads, Ads Visibility, Business opportunities and Instagram options, Optimization of Instagram profiles, Integrating Instagram with a Web Site and other social networks, Keeping up with posts.	10
IV	Creating business accounts on YouTube, YouTube Advertising, YouTube Analytics, E-mail marketing, E-mail marketing plan, E-mail marketing campaign analysis, Keeping up with conversions, Digital Marketing Budgeting - resource planning, cost estimating, cost budgeting, cost control.	10

Suggested Readings:

1. Chaffey, D, F.E. Chadwick, R. Mayer, and K. Johnston (2015). Internet Marketing: Strategy, Implementation, and Practice. Pearson India
2. Frost, Raymond D., Alexa Fox, and Judy Strauss (2018). E- Marketing. Routledge
3. Gupta, Seema (2018). Digital Marketing. McGraw Hill Education (India) Private Ltd.
4. Kapoor, Neeru. E-Marketing, Pinnacle learning
5. Kotler, Philip, HermawanKartajaya, and Iwan Setiawan (2017). Digital Marketing: 4.0 Moving from Traditional to Digital. Pearson India
6. Ryan, Damian and Jones Calvin (2016). Understanding Digital Marketing: Marketing Strategies for engaging the Digital Generation.

Additional Resources :

- Blanchard O. (2014) Social Media ROI: Managing and Measuring Social Media Efforts in Your Organisation. • Charlesworth, Alan (2018). Digital Marketing: A Practical Approach.
 - Gay, Richard, Alan Charlesworth, and Rita Esen. Online Marketing: a customer-led approach.Oxford University Press Inc., New York.
 - Ryan, Damian (2016). Understanding Digital Marketing: Marketing Strategies for engaging the Digital Generation.
 - Tasner, M. (2015) Marketing in the Moment: The Digital Marketing Guide to Generating More Sales and Reaching Your Customers First, 2/E, Pearson
- Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: Second	Semester: Fourth
Subject: Commerce		
Course Code: C010404T	Course Title: Fundamentals of Entrepreneurship	
<p>Course outcomes: After completing this course a student will have:</p> <ul style="list-style-type: none"> ✓ Ability to understand the concept of Entrepreneurship along with the basic laws and practices of Entrepreneurship. ✓ Ability to understand the terminologies associated with the field of Entrepreneurship along with their relevance. ✓ Ability to identify the appropriate functions and qualities of Entrepreneur for solving different problems. ✓ Ability to apply basic Entrepreneurship principles to solve business and industry related problems. ✓ Ability to understand the concept of Life Small Business, Raising of Funds and EDP. 		
Credits: 6		Core Compulsory / Elective: Elective
Max. Marks: 25+75		Min. Passing Marks: 10+25
Total No. of Lectures: 90		
Unit	Topics	No. of Lectures
I	Entrepreneurship: Meaning, Concept, Characteristics, Need, Functions, Theories of Entrepreneurship. Entrepreneur: Meaning, Characteristics, Qualities, Functions, Types, Difference between Entrepreneurship & Entrepreneur. Difference between	22

	Entrepreneur, Intrapreneur & Manager. Entrepreneurship & Environment.	
II	Entrepreneurship Development Programme (EDP): Meaning, Need, Objective, Steps, Outline, Achievements, Government Assistance and Incentives. Women Entrepreneurship: Meaning, Characteristics, Problems and Steps taken to promote Women Entrepreneur. Qualities of Women Entrepreneur.	31
III	Promotion of a Venture: Concept of Projects, Project Identification, Formulation and Report, Project Appraisal. Product Selection and Techniques, Raising of Funds: Concept, Need, Types and Sources.	21
IV	Small Business: Process of Establishing Small Business, Nature, Objectives and Importance of Small Business. Role of Financial Institutions in Financing of Small Business, Infrastructural Facilities. Legal Requirements for Establishment of New Unit. Entrepreneurial Consultancy Process and Methods.	16

Suggested Readings:

1. Desai, Vasant, “Dynamics of Entrepreneurial Development and Management”, Himalaya Publishing House
2. Desai, Vasant, “Management of Small Scale Industry”, Generic
3. Drucker, Perer, “Innovation and Entrepreneurship”, Harper Business; Reprint edition
4. Gupta, C.B. & Srinivasan, N.P., “Entrepreneurship Development”, S. Chand
5. Kenneth, P.Van, “Entrepreneurship and Small Business Management”
6. Pareek, Udai & Ven, “Developing Entrepreneurship book on Learning System”
7. Agrawal, R.C., ‘Udyamita Vikas’(Hindi)
8. Khanka, S.S. “Entrepreneurship Development”, S. Chand & Company

Note- Latest edition of the text books should be used.

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline,	(05 marks)

Participation in Different Activities)		
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Programme: B.Com.	Year: Second	Semester: Fourth
Subject: Commerce		
Course Code: C010405T	Course Title: Tourism and Travel Management	
Course outcomes: The objective of this course is to understand the fundamental concept of Tourism and to familiarize with the significance and emerging trends in tourism.		
Credits: 6		Core Compulsory / Elective: Elective
Max. Marks: 25+75		Min. Passing Marks:10+25
Total No. of Lectures: 90		
Unit	Topics	No. of Lectures
I	Introduction to Travel: Meaning and definitions of tourism, traveler, excursionist, tourists- objectives, nature and classification of tourism and tourists, Growth and Development of Tourism, Forms of Tourism: Inbound Outbound, Domestic and International.	15
II	The Modern Tour Industry: Package Tours- Custom Tours- Tour wholesalers- Types of Package tours: Independent Package, Hosted Tour, Escorted Tour, Sightseeing Tour Group, Incentive and Convention Tour- Man Market Package Holidays- Types of Tour Operations: Specialist Tour Operators: Specialist Tour Operators, Tour Operators reliance on other organization.	25
III	Tour Operations and Documentation: Functions- Sources of Income, How to set up a Travel Agency: Procedures for approval of a Travel Agency and Tour Operator, Travel Documentation: Passports- various types and requirements- Procedure to apply for Passports: VISA- various types and requirements- Documents required for Foreigners to visit India, Health Check Documents and Process for Encashment of Foreign Currency.	30
IV	Impact of Tourism and Tourism Organizations: Tourism Impacts: Economic impact, Social Impact, Cultural Impact and Environmental Impact- Strategies to overcome or reduce the negative Impact of Tourism.	20

Objectives, Functions of- United Nations World Tourism Organization (UNWTO), World Travel and Tourism Council (WTC), Pacific Asia Travel Association (PATA), International Air Transport Association (IATA), Travel Agents Association of India (TAAI), Indian Association of Tour Operators (IATO) and Federation of Hotel and Restaurant Associations of India (FHRAI).

Suggested Readings:

1. Bhatia A.K (2003) International Tourism, Sterling Publishers Pvt Ltd, New Delhi.
2. Pran Nath Seth(1997),Successful Tourism Management, Sterling Publishers Pvt Ltd, New Delhi,
3. Ghosh Bishwanth (2000), Tourism & Travel Management, Second Revised Edition Vikas Publishing House Pvt Ltd, New Delhi.

Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: Third	Semester: Fifth
Subject: Commerce		
Course Code: C010501T	Course Title: Corporate Accounting	
Course outcomes: This course enables the student to develop awareness about corporate accounting in conformity with the provisions of company act.		
Credits: 5	Core Compulsory / Elective: Compulsory	
Max. Marks: 25+75	Min. Passing Marks:10+25	
Total No. of Lectures: 75		
Unit	Topics	No. of Lectures
I	Shares: Features, Types Of Shares, Difference Between Preference Shares And Equity Shares, Share	15

	Capital And Its Types. Issues, Forfeiture And Re Issue Of Shares, Redemption Of Preference Shares.	
II	Debentures: Features & Types, Issue And Redemption Of Debentures, Profit Prior To Incorporation, Use Of Profit And Loss Prior To Incorporation, Methods Of Computing Profit And Loss Prior To Incorporation. Final Accounts, General Instruction For Preparation Of Balance Sheet And Statement Of Profit And Loss.	19
III	Valuation Of Goodwill: Meaning And Nature Of Goodwill, Needs And Methods Of Valuation Of Goodwill, Valuation Of Shares, Need And Methods Of Valuation Of Shares.	20
IV	Accounting For Amalgamation Of Companies As Per Indian Accounting Standard 14. Meaning, Characteristics And Objectives Of Amalgamation, Kinds Of Amalgamation, Accounting For Internal Reconstruction Internal And External.	21

Suggested Readings:

1. Gupta RL Radhaswami M, Company Accounts Sultan Chand And Company(Hindi and English)
2. Maheshwari SN And Maheshwari SK Corporate Accounting Vikas Publishing (Hindi and English)
3. Shukla SM And Gupta SP Advanced Accountancy Sahitya Bhawan Publication (Hindi and English)
4. Jaiswal K S Corporate Accounting Both English And Hindi Shukla MC Grewal
5. PS And Gupta SC Advanced Accounts S Chand And Company
6. Shukla MB Corporate Accounting Kitab Mahal
7. Babu, Deepak: Corporate Accounting, Navyug Publications, Agra (English and Hindi)

Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: Third	Semester: Fifth
Subject: Commerce		
Course Code: C010502T	Course Title: Goods and Services Tax	
Course outcomes: To provide students with the working knowledge of principles and provisions of GST to understand the relevance of GST in the present Indian tax in scenario and its contribution for economic development.		
Credits: 5	Core Compulsory / Elective: Compulsory	
Max. Marks: 25+75	Min. Passing Marks:10+25	
Total No. of Lectures: 75		
Unit	Topics	No. of Lectures
I	Indirect Tax: Meaning, Features, Difference Between Direct And Indirect Tax, Types Of Indirect Tax Before GST, Shortcoming Of Indirect Tax System During Pre GST Era. GST Meaning Advantages, Disadvantages Of Evaluation Of GST, Structure Of GST, CGST, SGST, IGST UTGST, And Important Definition Under GST Act.	17
II	Time Of Supply: Meaning Of Goods And Services, TOS Under Reverse Charge Mechanism, Invoicing Provisions, Provisions Related With Change Changes In GST Rate. Place Of Supply: POS Meaning, POS Of Goods And Services, Intra state And Interstate Supply. Value Of Supply: Meaning, Provisions Related With Determination Of Value Of Supply Of Goods And Services, Determination Of GST Liability.	16
III	Input Tax Credit ITC: Meaning Of Utilization Of ITC, Block Credit, Supply Not Eligible For ITC, Matching, Reversal And Reclaim Of ITC. Payment Under GST: Manner Of Payment Of GST Liability, Concept Of Electronic, Cash Credit And Liability Ledger, Refund Of Excess GST. Return: Meaning, Purpose And Importance, Different Types Of Return, Due Date Of Filing Return, Assessment Under GST: Meaning, Types Sales Assessment, Provisional Assessment, Summary Assessment, Best Judgment Assessment.	25
IV	Registration: Meaning Of Final Registration, Compulsory Registration, and Procedure For New	17

Registration, Amendment And Cancellation Of Registration. Accounts And Records: Manner Of Maintenance Of Accounts, Period Of Retention Of Relevant Records. Invoice: Format, Types Debit And Credit Note, Voucher Audit: Meaning, Types Mandatory, Departmental And Specific Audit, Penalty And Under GST, E -Way Bill.	
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Suggested Readings:

1. Malhotra XE and Agarwal goods and services tax Agra India Sahib Bhawan Publication English and Hindi
2. Agarwal Raj ke advanced handbook on GST background material on model GST law Sahitya Bhawan Publications.
3. Bansal K. M. GST Customer law taxman Publication private limited University edition
4. RK Singh PK a bird's eye view of GST Asia law house
5. Singhania VK student's guide to GST and customs law taxman Publication private limited University edition
6. Gupta & Maheshwari, Tyagi Goods and Services Tax, SBPD PUBLISHING HOUSE, AGRA
7. Babu, Deepak: GST: A Revolution on Indian Tax System, ISARA Solutions, New Delhi

Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: Third	Semester: Fifth
Subject: Commerce		

Course Code: C010503T	Course Title: Business Finance	
Course outcomes: This course is to help students understand the conceptual framework of Business Finance.		
Credits: 5	Core Compulsory / Elective: Elective	
Max. Marks: 25+75	Min. Passing Marks:10+25	
Total No. of Lectures (in hours per week): 75		
Unit	Topics	No. of Lectures
I	Business Finance: Nature And Scope, Finance Function Investment Financing And Dividend Decisions, Capital Budgeting: Meaning Nature And Importance Investment Decisions Are Its Major Evaluation Criteria.	15
II	Cost Of Capital: Meaning, Importance, Calculation Of Cost Of Debt, Preference Shares, Equity Shares And Retained Earnings, Combined (Weighted) Cost Of Capital, Capitalization- Meaning, Overcapitalization.	19
III	Dividend Policies: Issues In Dividend Policies, Dividend Models, Sources Of Funds: Long Term Funds, Short Term Funds, Nature Significance And Determinants Of Working Capital.	20
IV	Time value of Money, Uses of simple and Compound interest in business finance. Capital Market: (A) New Issue Market (B) Secondary Market Functions And Role Of Stock Exchange (BSE, NSE,) Money Market: Indian Money Markets- Composition And Structure.	21
Suggested Readings: <ol style="list-style-type: none"> 1. Avadhani V A Financial System 2. Bhalla VK Modern Working Capital Management 3. Chandra Prasanna Financial Management Theory And Practices 4. Khan NY And Jain PK Financial Management Tax And Problems 5. Pandey I M Financial Management <p>Note- Latest edition of the text books should be used.</p>		
This course can be opted as an elective by the students of following subjects: Open for all		
Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:		
Assessment and Presentation of Assignment	(04 marks)	
Class Test-I (Objective Questions)	(04 marks)	
Class Test-II (Descriptive Questions)	(04 marks)	
Class Test-III (Objective Questions)	(04 marks)	
Class Test-IV (Descriptive Questions)	(04 marks)	

Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)	
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Programme: B.Com.	Year: Third	Semester: Fifth
Subject: Commerce		
Course Code: C010504T	Course Title: Principles and Practices of Insurance	
<p>Course outcomes: After completing this course a student will have:</p> <ul style="list-style-type: none"> ✓ Ability to understand the concept of Insurance along with the basic laws and practices of Insurance. ✓ Ability to understand the terminologies associated with the field of Insurance and control along with their relevance. ✓ Ability to identify the appropriate method and types of Insurance for solving different problems. ✓ Ability to apply basic Insurance principles to solve business and industry related problems. <p>Ability to understand the concept of Life, Marine and Fire Insurance.</p>		
Credits: 5		Core Compulsory / Elective: Elective
Max. Marks: 25+75		Min. Passing Marks:10+25
Total No. of Lectures: 75		
Unit	Topics	No. of Lectures
I	Risk: Meaning, Types, Causes, Methods of Handling Risks. Insurance: Meaning, Origin & Development, Functions, Types, Principles, Advantages, Reinsurance, Double-Insurance.	17
II	Life Insurance: Meaning, Importance, Essentials of Life Insurance Contract, Procedure of Life Insurance. Life Insurance Policies, Nomination & Assignment, Surrender Value. Life Insurance Corporation: Functions & Organization.	20
III	Marine Insurance: Meaning, Significance, Scope and Insurable Risk, Characteristics of Marine Insurance, Contract, Types of Marine Policies, Main Clauses in Marine Policies and Marine Losses.	18

IV	Fire Insurance: Meaning, Hazards in Fire Insurance, Scope, importance, Fire Insurance Contract, Conditions of Fire Insurance Policy & Procedure. Miscellaneous Insurance: Motor Insurance, Burglary, Live-stock, Crop and Health Insurance.	20
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Suggested Readings:

- 1-Mishra M.N., Insurance- Principles & Practice.
- 2- Gupta O.S., Life Insurance.
- 3- Vinayakam, M. Radhaswami & Vasudevam, Insurance- Principles & Practice.
- 4- Kothari & Bhall, Principles & Practice of Insurance.
- 5- श्रीवास्तव बालचन्द्र, बीमा के तत्व I

6- शुक्ला सोमेश, शुक्ला सुधीर, मर्मा माहरुख, बीमा ममथ एवं खाते I Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:
Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: Third	Semester: Fifth
Subject: Commerce		
Course Code: C010505T	Course Title: Monetary Theory and Banking in India	
Course outcomes: The course expose the students to the working for money and financial system prevailing in India.		
Credits: 5	Core Compulsory / Elective: Elective	
Max. Marks: 25+75	Min. Passing Marks: 10+25	
Total No. of Lectures: 75		

Unit	Topics	No. of Lectures
I	Money: Functions, Alternative Measures To Money Supply In India And Their Different Components, Meaning And Changing Relative Importance Of Each Component, High Powered Money- Meaning And Uses, Sources Of Changes In High Powered Money. Financial System: Components, Financial Intermediaries.	17
II	Indian Banking System: Definition Of Bank, Commercial Banks, Importance And Functions, Structure Of Commercial Banking System In India. Regional Rural Banks, Cooperative Bank In India. Process Of Credit Creation By Banks; Determination Of Money Supply And Total Bank Credit.	17
III	Development Banks And Other Non-Banking Financial Institution: Main Features, Problems And Policies For Allocation Of Institutional Credit, Problem Between The Government And The Commercial Sector, Inter-Sectoral And Inter-Regional Problems, Problem Between Large And Small Borrowers.	25
IV	The Reserve Bank of India: Functions, Instruments Of Monetary And Credit Control; Main Features Of Monetary Policy Since Independence, Interest Rates; Various Rates In India (As Bond Rate, Bill Rate, Deposit Rate, etc.) Impact Of Inflation And Inflationary Expectations.	16

Suggested Readings:

1. Saha SK Indian Banking System SBPD Publication (Hindi and English)
2. Deshmukh And Indian Banking System Chandralok Prakashan(Hindi and English)
3. Gupta SB Monetary Planning Of India
4. Khan M Y Indian Financial System Theory And Practice
5. Sengupta A K & Agarwal K Money Market Operations In India

Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)

Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)	
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Programme: B.Com.	Year: Third	Semester: Sixth
Subject: Commerce		
Course Code: C010601T	Course Title: Accounting for Mangers	

Course outcomes:
After completing this course a student will have:

- ✓ Ability to understand the concept of Managerial Accounting along with the basic forms and norms of Managerial Accounting.
- ✓ Ability to understand the terminologies associated with the field of Managerial Accounting and control along with their relevance.
- ✓ Ability to identify the appropriate method and techniques of Managerial Accounting for solving different problems.
- ✓ Ability to apply basic Managerial Accounting principles to solve business and industry related issues and problems.

Ability to understand the concept of Budgetary Control, Cash Flow Statement, Fund Flow Statement, Break Even Analysis etc.

Credits: 5	Core Compulsory / Elective: Compulsory
Max. Marks: 25+75	Min. Passing Marks:10+25

Total No. of Lectures: **75**

Unit	Topics	No. of Lectures
I	Management Accounting- Concept, Meaning, Characteristics, Difference between Financial Accounting Management Accounting, Difference between Cost Accounting and Management Accounting, Techniques, Objectives and Importance. Management Accountant- Duties, Status, Functions and Responsibility. Financial Statement Analysis and Interpretation - Meaning, Objectives, Characteristics of an Ideal Financial Statement, Parties Interested in Financial Statement, Types of Financial Analysis - Horizontal, Vertical and Trend Analysis.	17
II	Ratio Analysis: meaning, Utility, Classification of Ratios - Profitability Ratio, Activity Ratio and Financial Position Ratios. Fund Flow and Cash Flow Statement-	16

	Concept, Meaning of the term Fund and Preparation of Fund Flow Statement and Cash Flow Statement (As-3).	
III	Business Budgeting: Meaning of Budget and Budgeting, Objectives, Limitations and importance, Essentials of effective Budgeting, Classification of Budgets- Flexible budget and Zero Based Budget. Marginal Costing: Meaning, Determination of Profit under Marginal Costing, Pricing of Product, make or buy Decision, Selection of most profitable channel. Break Even Analysis: Concept and Practical Applications of Break even Analysis.	22
IV	Standard Costing and Variance Analysis: Meaning and Objectives of Standard Costing Setting of Standard, Variance Analysis: Material and Labour Variance. Reporting to Management: Meaning, Objectives, Principles of Reporting, Importance of Reports, Classification of Reports, Reporting at different Levels of Management.	20

Suggested Readings:

1. Homgren, C.T., Gary L. Sundem and William O. Stratton: Introduction to Management Accounting, Prentice Hall of India, Delhi.
2. Homgren, Charles T., George Foster and Srikant M. Dailiar; Cost Accounting; A Managerial Emphasis, Prentice Hall of India, Delhi.
3. Lall, B.M. and I.C. Jain: Cost Accounting: Principles and Practice, Prentice Hall of India, Delhi.
4. Welsch Glenn A., Ronald W. Hilton and Paul N. Gordon Budgeting, Profit Planning and Control, Prentice hall of India, Delhi.
5. Baig Nafees: Cost Accounting, Rajat Publications, New Delhi. Baig Nafees: Management Accounting & Control, Ashish Publishing Home, New Delhi.
6. Sharma R.K. and Gupta S.K.; Management Accounting, Kalyani Publishers, Ludhiyana. (Hindi and English)
7. Lal Jawahar; Managerial Accounting, Himalya Publishing House, New Delhi.
8. Misra, A.K., Management Accounting, (Hindi and English) Navneet Prakashan, Nazibabad.

Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
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Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: Third	Semester: Sixth
Subject: Commerce		
Course Code: C010602T	Course Title: Auditing	
Course outcomes: This course aims at imparting knowledge about the principles and methods of auditing and their application.		
Credits: 5	Core Compulsory / Elective: Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 10+25	
Total No. of Lectures: 75		
Unit	Topics	No. of Lectures
I	Methodology of Accounting, Auditing and Fraud risk management in Kautilya's Arthshastra. Audit and Audit Process: Meaning, Nature, Objectives and Various Classes of Auditing, Standard of Auditing, Pronouncements on accepted Auditing practices, Internal Control and the need for its evaluation by the Auditor.	17
II	Audit Procedures: Verification programme-selective verification, Audit in depth, test checking, Auditor's Approach to statistical sampling, Routine checking, vouchers, verification and valuation of assets and liabilities, Auditor's Report on Profit and Loss Account and Balance Sheet.	15
III	Audit of Limited Companies: Qualifications and Appointment of Company Auditors, their powers, duties and liabilities as per Company Act 1956, Enquiries under Section 227 (IA), Audit of share capital, share transfer and managerial remuneration,	19

	Additional matters in the Auditor's Report (Manufacturing and other companies), Auditor's Report Order 1988.	
IV	Audit of Public Sector Undertaking and Banks: Special features concerning Audit of departmental undertakings, Statutory Corporations and Government Companies, Procedure of appointment of Auditors, Special features relating to the audit of Banks, Audit of Insurance Companies and audit of non-profit companies. Cost Audit: Importance of cost audit, Provisions regarding cost audit, Cost Audit report, Tax and Social Audit. Internal Audit: Objective and scope of Internal Audit, Responsibilities and Authority of Internal Auditors, Relationship between internal auditor and statutory auditor.	24

Suggested Readings:

1. Gupta Kamal : Contemporary Auditing, TATA Mc Graw, New Delhi.
2. Tandon, B.N. : Principles of Auditing, S. Chand & Company, New Delhi.
3. Pargare Dinkar : Principles and practices of Auditing, Sultan Chand, New Delhi.
4. Sharma, T.R. : Auditing Principles and Problems, Sahitya Bhawan, Agra. (Hindi and English)
5. Yadav, Pankaj, Auditing, Neel Kamal Prakashan, Delhi(Hindi and English)
6. Sharma, Sanjeev, Auditing: MK Publications , Agra (Hindi and English)

Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Programme: B.Com.	Year: Third	Semester: Sixth
Subject: Commerce		
Course Code: C010604T	Course Title: Financial Market Operations	
<p>Course outcomes: After completing this course a student will have:</p> <ul style="list-style-type: none"> ✓ Ability to understand the concept of Financial Market along with the basic forms and norms of Financial Market. ✓ Ability to understand the terminologies associated with the field of Financial Market and control along with their relevance. ✓ Ability to identify the appropriate method and techniques of Financial Market for solving different problems. ✓ Ability to apply basic Financial Market principles to solve business and industry related problems. ✓ Ability to understand the concept of Primary and Secondary Market, Stock Exchange, SEBI etc. 		
Credits: 5		Core Compulsory / Elective: Elective
Max. Marks: 25+75		Min. Passing Marks: 10+25
Total No. of Lectures: 75		
Unit	Topics	No. of Lectures
I	Financial Markets an Overview: Meaning of Financial Market and its Significance in the Financial System. Financial Markets in the Organized Sector - Industrial Securities Market, Government Securities Market, Long-term Loans Market, Mortgages Market, Financial Guarantee Market, Meaning and Structure of Money Market in India, Characteristics of a Developed Money Market, Significance and Defects of Indian Money Market.	17
II	Capital Market: New issue market - Meaning and Functions of New Issue Market, Instruments of New Issues, Players and their role in the New Issue Market, issue-pricing and marketing. Defects and Remedies of New Issue Market.	26
III	Secondary market: Functions and role of stock exchange; Listing procedure and legal requirements; Public Stock Exchanges-NSE, BSE and OTCEI. Functionaries on Stock Exchanges: Brokers, Sub brokers, market makers, jobbers, portfolio consultants, institutional investors.	16

IV	<p>Investor Protection: Grievances concerning stock exchange dealings and their removal, Demat Trading.</p> <p>SEBI Guidelines - Primary Market, Secondary Market and the Protection of investor's interest, NCLT & NCLAT.</p>	16												
<p>Suggested Readings:</p> <ol style="list-style-type: none"> 1. Machiraju, 'Indian Financial System' – Vikas Publishing House. 2. Varshney P.N., & Mittal D.K., 'Indian Financial System', Sultan Chand & Sons, New Delhi. 3. Avadhani V.A Capital Market, Himalaya Publishing House, New Delhi 4. Mulay, M. A., "New Issues Capital Market in India" 5. Gordon & Natarajan, "Indian Financial System" Himalaya Publishing House. 6. Avdhani, V. A., "Investment Management" Himalaya Publishing House. 7. Gupta, O. P., "Indian Securities Market". <p style="text-align: center;">Note- Latest edition of the text books should be used.</p>														
<p>This course can be opted as an elective by the students of following subjects: Open for all</p>														
<p>Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Assessment and Presentation of Assignment</td> <td style="text-align: center;">(04 marks)</td> </tr> <tr> <td>Class Test-I (Objective Questions)</td> <td style="text-align: center;">(04 marks)</td> </tr> <tr> <td>Class Test-II (Descriptive Questions)</td> <td style="text-align: center;">(04 marks)</td> </tr> <tr> <td>Class Test-III (Objective Questions)</td> <td style="text-align: center;">(04 marks)</td> </tr> <tr> <td>Class Test-IV (Descriptive Questions)</td> <td style="text-align: center;">(04 marks)</td> </tr> <tr> <td>Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)</td> <td style="text-align: center;">(05 marks)</td> </tr> </table>			Assessment and Presentation of Assignment	(04 marks)	Class Test-I (Objective Questions)	(04 marks)	Class Test-II (Descriptive Questions)	(04 marks)	Class Test-III (Objective Questions)	(04 marks)	Class Test-IV (Descriptive Questions)	(04 marks)	Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)
Assessment and Presentation of Assignment	(04 marks)													
Class Test-I (Objective Questions)	(04 marks)													
Class Test-II (Descriptive Questions)	(04 marks)													
Class Test-III (Objective Questions)	(04 marks)													
Class Test-IV (Descriptive Questions)	(04 marks)													
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)													
Programme: B.Com.	Year: Third	Semester: Sixth												
Subject: Commerce														
Course Code: C010605T	Course Title: Human Resource Management													
<p>Course outcomes: The paper aims to develop in the students a proper understanding about human resource management.</p>														
Credits: 5	Core Compulsory / Elective: Elective													
Max. Marks: 25+75	Min. Passing Marks: 10+25													

Total No. of Lectures: **75**

Unit	Topics	No. of Lectures
I	Human Resource Management concept and function, role of competencies of HR manager at our policies evolution of HRM emerging challenges of Human Resource Management workforce diversity empowerment VRS work life balance downsizing.	15
II	Recruitment & Selection: Recruitment, factors affecting recruitment, sources of recruitment, Selection – Process, selection test, Interview, Orientation, Placement. Training & Development: Training-Objectives & Importance of training, Training Methods-On job training and off- the job training.	20
III	Employee Compensation: Compensation & Welfare, Job Evaluation. Performance Appraisal: Techniques, Job Enlargement & Job Enrichment, Quality of Work Life, Worker’s Participation in Management.	25
IV	EMPLOYEE WELFARE: Various welfare schemes & Safety Measures. Employee Benefits – Meaning and its types, Fringe Benefits; Remuneration – Salary, Bonus, Commission, Long Term Incentives, Perquisites. Grievance Handling & Discipline – Meaning, Importance. Collective Bargaining – Meaning and Importance, Process.	15

Suggested Readings:

1. Aswathappa K Maine resource management Tata McGraw Hill
2. Verma Pramod SaviBagiyaprabandhan Rao VSP human resource management Excel books
3. Tripathi PC personnel management and Industrial Relations Sultan Chand and sons
4. Agarwal & Fauzdar, Human Resource Management-SBPD Publishing House, Agra (English/Hindi)

Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)

Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)	
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Programme : B.Com.	Year: Third	Semester: Sixth
Subject: Commerce		
Course Code: C010606T	Course Title: Business Ethics and Corporate Governance	
Course outcomes: This course seeks to provide knowledge about the concepts, tools, techniques, and relevance of Business Ethics and Corporate Governance in the present changing scenario.		
Credits: 5	Core Compulsory / Elective: Elective	
Max. Marks: 25+75	Min. Passing Marks: 10+25	
Total No. of Lectures: 75		
Unit	Topics	No. of Lectures
I	Values – Importance, Sources of Value Systems, Types, Values, Loyalty and Ethical Behaviour, Values across Cultures; Business Ethics – Nature, Characteristics and Needs, Ethical Practices in Management.	17
II	The Ethical Value System – Universalism, Utilitarianism, Distributive Justice, Social Contracts, Individual Freedom of Choice, Professional Codes; Culture and Ethics – Ethical Values in different Cultures, Culture and Individual Ethics.	26
III	Law and Ethics – Relationship between Law and Ethics, Other Bodies in enforcing Ethical Business Behaviour, Impact of Laws on Business Ethics; Social Responsibilities of Business – Environmental Protection, Fair Trade Practices, Fulfilling all National obligations under various Laws, Safeguarding Health and well- being of Customers.	16
IV	Corporate Governance: Issues, need, corporate governance code, transparency & disclosure, role of auditors, board of directors and shareholders; Global issues of governance, accounting and regulatory framework, corporate scams, committees in India and	16

abroad, **corporate social responsibility.**

Suggested Readings:

1. Kitson Alan- Ethical Organisation, Palgrave
2. L. T. Hosmer : The Ethics of Management, Universal Book.
3. D. Murray : Ethics in Organizational, Kogan Page.
4. S. K. Chakraborty : Values and Ethics in Organisation, OUP

Note- **Latest edition of the text books should be used.**

This course can be opted as an elective by the students of following subjects:

Open for all

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Assessment and Presentation of Assignment	(04 marks)
Class Test-I (Objective Questions)	(04 marks)
Class Test-II (Descriptive Questions)	(04 marks)
Class Test-III (Objective Questions)	(04 marks)
Class Test-IV (Descriptive Questions)	(04 marks)
Overall performance throughout the Semester (includes Attendance, Behaviour, Discipline, Participation in Different Activities)	(05 marks)

Course prerequisites: To study this course, a student may have **any subject in class 12th**.

Suggested equivalent online courses:

There are lots of online certificate and diploma courses available in various universities and institutions.

Further Suggestions:

After completing B.Com. student has a vast choice in different fields where they can explore their inner talent. Job areas for commerce graduate are in Business Consultancies, Educational Institutes, Industrial Houses, Public Accounting Firms, Policy Planning, Foreign Trade, Banks, Budget Planning, Inventory Control, Merchant Banking, Marketing, Working Capital Management, Treasury and Forex Department, Investment Banking and so many for them explore further.

Greater employment opportunities

In many career sectors, such as Higher Education, Administration, public affairs, and social services, a master's degree is replacing a bachelor's as the minimum requirement for employment.

Earlier with a bachelor's degree like B.Com. one could secure an entry-level position as an admissions counselor, academic adviser, or student services coordinator. While holding a graduate degree is not a guarantee of ultimate success, it certainly opens many more doors for employment.

Plethora of Specialisation

You may get options for specialisation during your bachelor's in Commerce degree. Some of them are Taxation, Marketing, Computers, etc. But, most of the times, there is a general degree i.e., B.Com. that provides knowledge in Commerce and Business. So, if you want to pursue education based on a specific industry or profession the Bachelor of Commerce programme targets a number of specialisations from Finance to Marketing to HR to Logistics and Supply Chain Management.

Helps in Overall Personality Development

Pursuing a bachelor's degree can be one of the most exhilarating experiences, in fact, you have just started your journey in this competitive world and a bachelor's of commerce (B. Com) helps you face the world right after school. But a Master in Business Administration prepares you to suit yourself to the industry's needs. The curriculum is carefully knitted and includes workshops, seminars, projects, etc. that develops your overall personality.

Vast Career choice

There are so many courses available for B.Com. Students such as M.Com., MBA, CA (Chartered Accountant), CS (Company Secretary), MCA and many of the diploma courses, etc. After completion of Bachelor in Commerce, an individual has the option to pursue higher studies as M-Com (Masters of Commerce) or MBA (Masters in Business Administration), both being postgraduate program focusing in Commerce, Accounting, Economics, and Management related subjects. Not only this Bachelor program also prepares students for CA (Chartered Accountant), CS (Company Secretary) and CMA (Cost and Management Accountant) as an advance career option in this field.

At the End of the whole syllabus any remarks/ suggestions:

The whole syllabus of Undergraduate Commerce is divided into three parts. After first year (two semesters) completion the certificate awarded is called C.Com. (Certificate in Commerce), after two year (four semester) completion the diploma awarded is called D.Com. (Diploma in Commerce) and after three year (six semester) completion the bachelor degree of commerce awarded is called B. Com. (Bachelor of Commerce).

DEPARTMENT OF HIGHER EDUCATION U.P. GOVERNMENT, LUCKNOW

**National Education Policy-2020
Common Minimum Syllabus
for all U.P. State Universities and Colleges
For the first three years of
Higher Education (UG)**



PROPOSED STRUCTURE OF SYLLABUS

BOTANY

(FACULTY OF SCIENCE)

SUBJECT: BOTANY

Name	Designation	Affiliation
Syllabus Steering Committee		
Mrs. Monika S. Garg, (I.A.S.) Chairperson Steering Committee	Additional Chief Secretary	Dept. of Higher Education U.P., Lucknow
Prof. Poonam Tandan	Professor, Dept. of Physics	Lucknow University, U.P.
Prof. Hare Krishna	Professor, Dept. of Statistics	CCS University Meerut, U.P.
Dr. Dinesh C. Sharma	Associate Professor, Dept. of Zoology	K.M. Govt. Girls P.G. College Badalpur, G.B. Nagar, U.P.
Supervisory Committee-Science Faculty		
Dr. Vijay Kumar Singh	Associate Professor, Dept. of Zoology	Agra College, Agra
Dr. Santosh Singh	Dean, Dept. of Agriculture	Mahatma Gandhi Kashi Vidhyapeeth, Varanasi
Dr. Baby Tabussam	Associate Professor, Dept. of Zoology	Govt. Raza P.G. College Rampur, U.P.
Dr. Sanjay Jain	Associate Professor, Dept. of Statistics	St. John's College, Agra

Syllabus Developed by:

S.No.	Name	Designation	Department	College/University
1.	Dr Seema Bhadauria	Head & Associate Professor	Botany & Biotechnology	R B S College, Agra
2.	Dr Shweta Shekhar	Assistant Professor	Botany	DDU Gorakhpur University, Gorakhpur
3.	Dr Himshikha Yadav	Assistant Professor	Botany	VRALGM Degree College, Bareilly

Semester-wise Titles of the Papers in B.Sc. (Botany)					
Year	Sem.	Course Code	Paper Title	Theory/ Practical	Credits
<i>Certificate Course In Microbial Technology & Applied Botany</i>					
FIRST YEAR	I	B040101T	Microbiology & Plant Pathology	Theory	4
		B040102P	Techniques in Microbiology & Plant Pathology	Practical	2
	II	B040201T	Archegoniates & Plant Architecture	Theory	4
		B040202P	Land Plants Architecture	Practical	2
<i>Diploma in Plant Identification, Utilization & Ethnomedicine</i>					
SECOND YEAR	III	B040301T	Flowering Plants Identification & Aesthetic Characteristics	Theory	4
		B040302P	Plant Identification technology	Practical	2
	IV	B040401T	Economic Botany, Ethnomedicine & Phytochemistry	Theory	4
		B040402P	Commercial Botany & Phytochemical Analysis	Practical	2
<i>Bachelor of Science</i>					
THIRD YEAR	V	B040501T	Plant Physiology, Metabolism & Biochemistry	Theory	4
		B040502T	Molecular Biology & Bioinformatics	Theory	4
		B040503P	Experiments in physiology, Biochemistry & molecular biology	Practical	2
		B040504R	*Project-I	Practical	3
	VI	B040601T	Cytogenetics, Plant Breeding & Nanotechnology	Theory	4
		B040602T	Ecology & Environment	Theory	4
		B040603P	Cytogenetics, Conservation & Environment management	Practical	2
		B040604R	*Project-II	Practical	3

Subject prerequisites:

1. To study Botany, a student must have had the subject Biology/Biotechnology learnt at 10+2 level.
2. Keen interest in plants and plant-related research, Potential in mathematics, biology and chemistry
3. Skills and aptitude for scientific study and research
4. Creativity and good comprehension while working on scientific procedures and research
5. Computer aptitude.

COURSE INTRODUCTION

The new curriculum of B.Sc. in Science (Botany) offers essential knowledge and technical skills to study plants in a holistic manner. Students would be trained in all areas of plant biology using a unique combination of core, elective and vocational papers with significant inter-disciplinary components.

Students would be exposed to cutting-edge technologies that are currently used in the study of plant life forms, their evolution and interactions with other organisms within the ecosystem. Students would also become aware of the social and environmental significance of plants and their relevance to the national economy.

B.Sc. Botany Programme covers academic activities within the classroom sessions along with practical concepts at laboratory sessions. Infield, outstation activities and projects are also required to be organized for real-life experience and learning.

Candidates who have curiosity in plants kingdom, ecosystem, love exploring exotic places and wish to work as researchers or professions like Botanist, Conservationist, Ecologist, etc. can choose B.Sc. Botany course.

Programme outcomes (POs):	
Transformed curriculum shall develop educated outcome-oriented candidature, fostered with discovery-learning, equipped with practice & skills to deal practical problems and versed with recent pedagogical trends in education including e-learning, flipped class and hybrid learning to develop into responsible citizen for nation-building and transforming the country towards the future with their knowledge gained in the field of plant science.	
PO 1	CBCS syllabus with a combination of general and specialized education shall introduce the concepts of breadth and depth in learning
PO2	Shall produce competent plant biologists who can employ and implement their gained knowledge in basic and applied aspects that will profoundly influence the prevailing paradigm of agriculture, industry, healthcare and environment to provide sustainable development.
PO 3	Will increase the ability of critical thinking, development of scientific attitude, handling of problems and generating solutions, improve practical skills, enhance communication skill, social interaction, increase awareness in judicious use of plant resources by recognizing the ethical value system.
PO 4	The training provided to the students will make them competent enough for doing jobs in Govt. and private sectors of academia, research and industry along with graduate preparation for national as well as international competitive examinations, especially UGC-CSIR NET, UPSC Civil Services Examination, IFS, NSC, FCI, BSI, FRI etc.
PO 5	Certificate and diploma courses are framed to generate self- entrepreneurship and self-employability, if multi exit option is opted.
PO 6	Lifelong learning be achieved by drawing attention to the vast world of knowledge of plants and their domestication.

Programme specific outcomes (PSOs):
B.Sc. I Year / Certificate course in Microbial Technology & Classical Botany

This Programme imparts knowledge on various fields of plant biology through teaching, interactions and practical classes. It shall maintain a balance between the traditional botany and modern science for shifting it towards the frontier areas of plant sciences with applied approach. This syllabus has been drafted to enable the learners to prepare them for self-entrepreneurship and employment in various fields including academics as well as competitive exams. Students would gain wide knowledge in following aspects:

1. Diversity of plants and microbes, their habitat, morphology, architecture and reproduction.
2. Plant disease causing microbes, symptoms & control.
3. Economic value of plants and their use in Human Welfare.

Programme specific outcomes (PSOs):
B.Sc. II Year/ (Diploma in Plant Identification, Utilization & Ethnomedicine)

This course provides a broad understanding of identifying, growing and using plants. This course is primarily aimed to introduce people to the richness of plant diversity found in surrounding areas. Lecture sessions are designed to cover fundamental topics concerning classification of plants and their utilization required for understanding the flora and vegetation. Practical sessions are organized following theory for easy understanding of the various parts of the plants, structural organization of floral parts and diversity therein. Participants are taken to different locations covering a variety of habitats and forest types to acquaint them with the native flora. in the long run, will contribute towards building momentum for

people's participation in environmental conservation without compromising on academic rigor and our rich wealth of knowledge inherited over generations.

1. The course will cover conventional topics in Field Botany like Evolutionary History & Diversity of plants, Complete Morphology, Nomenclature of plants, Systems of Classification, Keys to important Families of Flowering Plants, Field Data Collection & Herbarium Techniques.
2. The course is designed to become a commercial crop grower, florist, protected cultivator, green belt plant advisor to industries, pharmacologist & taxonomist.

Programme specific outcomes (PSOs):
B.Sc. III Year / Bachelor of Science

The learning outcomes of a three years graduation course are aligned with programme learning outcomes but these are specific to-specific courses offered in a program. The core courses shall be the backbone of this framework whereas discipline electives, generic electives and skill enhancement courses would add academic excellence in the subject together with a multi-dimensional and multidisciplinary approach.

1. Understanding of plant classification systematics, evolution, ecology, developmental biology, physiology, biochemistry, plant interactions with microbes and insects, morphology, anatomy, reproduction, genetics and molecular biology of various life-forms.
2. This course is suitable to produce expertise in conservation biology like ex-situ conservation, response to habitat change, genotype characterization and reproductive biology.
3. Understanding of various analytical techniques of plant sciences, use of plants as industrial resources or as a human livelihood support system and is well versed with the use of transgenic technologies for basic and applied research in plants.
4. Understanding of various life forms of plants, morphology, anatomy, reproduction, genetics, microbiology, molecular biology, recombinant DNA technology, transgenic technology and use of bioinformatics tools and databases and the application of statistics to biological data.
5. Entrepreneurship Skill Development, Understand the issues of environmental contexts and sustainable development, Inculcation of human values,
6. Strengthen mathematical and computational skills. Enable students to use ICT & AI effectively.
7. Develop good skills in the laboratory such as observation and evaluation by the use of modern tools and technology.

PSO 1

Understanding the nature and basic concepts of all the plant groups, their metabolism, components at the molecular level, biochemistry, taxonomy and ecology. The course will make them aware of natural resources and the environment and the importance of conserving it. Hands-on training in various fields will develop practical skills, handling equipment and laboratory use along with collection and interpretation of biological materials and data. Knowledge gained through theoretical and lab-based experiments will generate technical personnel in various priority areas such as genetics, cell and molecular biology, plant systematics and biotechnology.

PSO 2	Botanists are able to contribute to all these fields and therefore, are mainly employed with educational institutions, government or public sectors or companies in industries, such as agriculture or forestry, oil, chemical, biotechnology, geological survey, environmental protection, drugs, genetic research, plant resources laboratories, plant health inspection services, lumber and paper, food, fermentation, nursery, fruit and so on. Jobs available as a botanist: •Microbiologist, plant pathologist, Taxonomist • Plant Physiologist • Plant Biochemist • Researcher • Mycologist • Ecologist • Weed Scientist • Palaeobotanist • Conservationist • Fruit Grower • Morphologist • Cytologist • Ethnobotanist • Plant geneticists etc.
PSO 3	Inculcate strong fundamentals on modern and classical aspects of Botany, understand knowledge of Botany is an essential pre-requisite for the pursuit of many applied sciences. It will facilitate students for taking up and shaping a successful career in Botany and allied sciences.
PSO 4	Introduction of research project will inculcate research aptitude and passion for higher education and scientific research.

Proposed Year wise Structure of B.Sc. in Botany (CORE / ELECTIVE COURSES & PROJECTS)											
Subject: Botany											Total Credits /hrs/
Course/Entry –Exit levels	Year	Sem.	Paper 1	Credit/ hrs	Paper 2	Credit/ hrs	Paper 3	Credits/hrs	Research Project	Credit/	
Certificate Course In Microbial Technology & Applied Botany	I	I	Microbiology & Plant Pathology	4/60	Techniques in Microbiology & Plant Pathology	2/60	--		Nil	Nil	6/120
		II	Archegoniates & Plant Architecture	4/60	Land Plants Architecture	2/60	--		Nil	Nil	6/120
Diploma in Plant Identification, Utilization & Ethnomedicine	II	III	Flowering Plants Identification & Aesthetic Characteristics	4/60	Plant Identification technology	2/60	--		Nil	Nil	6/120
		IV	Economic Botany, Ethnomedicine & Phytochemistry	4/60	Commercial Botany & Phytochemical Analysis	2/60	-		Nil	Nil	6/120
Bachelor of Science		V	Plant Physiology, Metabolism & Biochemistry	4/60	Molecular Biology & Bioinformatics	4/60	Experiments in physiology, Biochemistry &	2/60	*Project-I	3/45	13/205

	III						molecular biology					
	VI	Cytogenetics, Plant Breeding & nanotechnology	4/60	Ecology & Environment	4/60	Cytogenetics, Conservation & Environment management	2/60	*Project- II	3/45	13/205		
Comments	Total Credits/Hrs. / lectures: (Credits can be earned from On-line Portals of UGC to create Academic Bank and 15% of the topics of each paper can be taught by on-line/ Virtual/ ICT based as per choice of the Institution) * Suggestive List of Projects mentioned in Detailed Paper Syllabus										50/890	
Botany Course is One of the Major Subjects for Biology Students and Minor or Elective for students of other faculties Second Major Subject Can be Zoology/ Biotechnology /Microbiology Third Major Subject can be from Science or Any other faculty of UGC /AICTE – (Arts/ Agriculture/ Education/ law/ Commerce) Fourth Subject is Minor or Elective to be selected from any one of other Faculties as per student’s own interest One Vocational Course has to be opted from the list given in Syllabus as per NSDC guidelines One Co-curricular Course is compulsory												
Internal Assessment & External Assessment												
Internal Assessment				Marks	External Assessment				Marks			
Class Interaction				5	Viva Voce on Practicals				10			
Quiz				5	Report of Botanical Excursion/ Lab Visits/Industrial training/ Survey/Collection/ Models				10			
Seminar				7	Table work / Experiments				45			
Assignments (Charts/ Flora/ Rural Service/ Technology Dissemination/ Botanical Excursion/ Lab Visits/Industrial training)				8	Practical Record File				10			
TOTAL				25					75			
* Botanical Excursion/ Lab Visits/Industrial training Is compulsory												

CERTIFICATE COURSE IN MICROBIAL TECHNOLOGY & CLASSICAL BOTANY / B.Sc.-I

Programme: <i>Certificate Course in Microbial Technology & Classical Botany</i>		Year: I	Semester: I/Paper-I
Subject: Botany			
Course Code: B040101T	Course Title: Microbiology & Plant Pathology		
<p>Course outcomes: After the completion of the course the students will be able to:</p> <ol style="list-style-type: none"> 1. Develop understanding about the classification and diversity of different microbes including viruses, Algae, Fungi & Lichens & their economic importance. 2. Develop conceptual skill about identifying microbes, pathogens, biofertilizers & lichens. 3. Gain knowledge about developing commercial enterprise of microbial products. 4. Learn host –pathogen relationship and disease management. 5. Learn Presentation skills (oral & writing) in life sciences by usage of computer & multimedia. 6. Gain Knowledge about uses of microbes in various fields. 7. Understand the structure and reproduction of certain selected bacteria algae, fungi and lichens 8. Gain Knowledge about the economic values of this lower group of plant community. 			
Credits: 4		Core Compulsory	
Max. Marks: 25+75		Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week): 4-0-0			
Unit	Topic	No. of Lectures (60 hrs)	

I	<p>A. Introduction to Indian ancient, Vedic and heritage Botany and contribution of Indian Botanists, in context with the holistic development of modern science and technology, has to be taught, practiced and assessed via class interaction/ assignments / self-study mentioned under Continuous Internal Evaluation (CIE).</p> <p>B. Microbial Techniques & instrumentation Microscopy – Light, phase contrast, electron, scanning and transmission electron microscopy, staining techniques for light microscopy, sample preparation for electron microscopy. Common equipment of microbiology lab and principle of their working – autoclave, oven, laminar air flow, centrifuge. Colorimetry and spectrophotometry, immobilization methods, fermentation and fermenters.</p>	8
II	<p>Microbial world Cell structure of Eukaryotic and prokaryotic cells, Gram positive and Gram-negative bacteria, Structure of a bacteria; Bacterial Chemotaxis and Quorum sensing, Bacterial Growth curve, factors affecting growth of microbes; measurement of growth; Batch culture, fed batch culture and continuous culture; Synchronous growth of microbes; Sporulation and reproduction and recombination in bacteria. Viruses, general characteristics, viral culture, Structure of viruses, Bacteriophages, Structure of T4 & λ-phage; Lytic and Lysogenic cycles, viroid, Prions & mycoplasma & phytoplasma, Actinomycetes & plasmids and their economic uses.</p>	8
III	<p>Phycology Range of thallus organization in Algae, Pigments, Reserve food –Reproduction - Classification and life cycle of – <i>Nostoc, Chlorella, Volvox, Hydrodictyon, Oedogonium, Chara; Sargassum, Ectocarpus, Polysiphonia.</i> Economic importance of algae - Role of algae in soil fertility- biofertilizer – Nitrogen fixation- Symbiosis; Commercial products of algae –biofuel, Agar.</p>	7
IV	<p>Mycology General characteristics, nutrition, life cycle, Economic importance of Fungi, Classification upto class. Distinguishing characters of Myxomycota: General characters of Mastigomycotina, Zygomycota: <i>Rhizopus</i>, Ascomycota: <i>Saccharomyces, Penicillium, Peziza.</i> Basidiomycotina: <i>Ustilago, Puccinia, Agaricus;</i> Deuteromycotina: <i>Fusarium, Alternaria.</i> Heterothallism, Physiological specialization, Heterokaryosis & Parasexuality.</p>	7
V	<p>Mushroom Cultivation, Lichenology & Mycorrhiza Mushroom cultivation. General account of lichens, reproduction and significance; <i>Mycorrhiza: ectomycorrhiza and endomycorrhiza</i> and their significance.</p>	7
VI	<p>Plant Pathology Disease concept, Symptoms, Etiology & causal complex, Primary and secondary inoculum, Infection, Pathogenicity and pathogenesis, Koch's Postulates. Mechanism of infection (Brief idea about Pre-penetration, Penetration and Post-penetration), Disease cycle (monocyclic, polycyclic and polyetic). Defense mechanism with special reference to Phytoalexin, Resistance- Systemic acquired and Induced systemic fungicides- Bordeaux mixture, Lime Sulphur, Tobacco decoction, Neem cake & oil</p>	7
VII	<p>Diseases and Control Symptoms, Causal organism, Disease cycle and Control measures of – Early & Late Blight of Potato, False Smut of Rice/ Brown spot of rice, Black Stem Rust of Wheat, <i>Alternaria</i> spot' and 'White rust of Crucifers, Red Rot of Sugarcane, Wilting of Arhar, Mosaic diseases on tobacco and cucumber, yellow vein mosaic of bhindi; Citrus Canker, Little leaf of brinjal; Damping off of seedlings, Disease management: Quarantine, Chemical, Biological, Integrated pest disease management</p>	8

v. http://wgbis.ces.iisc.ernet.in/biodiversity/sahyadri/wgbis_info/botany_history.pdf

vi Ancient Botany (Sciences of Antiquity) Paperback – 1 October 2015 by Gavin Hardy (Author), Laurence Totelin (Author)

vii. <https://www.plantsdiseases.com/p/symptoms.html>

viii. <https://www.plantsdiseases.com/p/pathogenic-diseases-in-plants.html>

UNIT-I B.

1. Kumar, H.D. (1999). Introductory Phycology. Affiliated East-West. Press Pvt. Ltd. Delhi. 2nd edition.
2. Tortora, G.J., Funke, B.R., Case, C.L. (2010). Microbiology: An Introduction, Pearson Benjamin Cummings, U.S.A. 10th edition.
3. Sethi, I.K. and Walia, S.K. (2011). Text book of Fungi & Their Allies, MacMillan Publishers Pvt. Ltd., Delhi.
4. Aggarwal, S. K. 2009. Foundation Course in Biology, A one books Pvt. Ltd., New Delhi.
5. Aneja, K. R. 1993. Experiments in Microbiology, Pathology and Tissue Culture, Vishwa Prakashan, NewDelhi.
6. Annie Ragland, 2012. Algae and Bryophytes, Saras Publication, Kanyakumari, India.
7. Basu, A. N. 1993. Essentials of Plant Viruses, Vectors and Plant diseases, New Age International, New Delhi.
8. Chopra. G. L. 1984. A text book of Algae, Rastogi publications, Meerut,India.
9. Desikachari, T. V. 1959. Cyanophyta, ICAR, New Delhi.
10. Dubey, R. C. and Maheshwari. D.K. 2012. Practical Microbiology, S. Chand & Company, Pvt. Ltd., NewDelhi.
11. Fritsch, R. E. 1977. Structure and Reproduction of Algae, Cambridge University Press, London.
12. Kodo, C.I. and Agarwal, H.O. 1972. Principles and techniques in Plant Virology, Van Nostrand, Reinhold Company, New York.
13. Agrios, G.N. (1997). Plant Pathology, 4th edition. Cambridge, U.K.: Academic Press.
14. Alexopoulos, C.J., Mims, C.W., Blackwell, M. (1996). Introductory Mycology, 4th edition. Singapore, Singapore: John Wiley & Sons.
15. Sethi, I.K. and Walia, S.K. (2011). Text book of Fungi and Their Allies. Noida, U.P.: Macmillan Publishers India Ltd.
16. Reven, F.H., Evert, R. F., Eichhorn, S.E. (1992). Biology of Plants. New York, NY: W.H. Freeman and Company.
17. Sharma, P.D. (2011). Plant Pathology. Meerut, U.P.: Rastogi Publication.
18. Webster, J., Weber, R. (2007). Introduction to Fungi, 3rd edition. Cambridge, U.K.: Cambridge University Press..
19. Pandey B.P. 2001. College Botany Volume 1, S Chand & Company Pvt.Ltd, New Delhi.
20. Pandey. B.P. 2014 Modern Practical Botany, (Vol-I) S. Chand and Company Pvt. Ltd., New Delhi.
21. Pelzar, 1963. Microbiology, Tata Mc Graw Hill, New Delhi
22. Rangaswamy, G. 2009, Disease of Crop Plants in India, Prientice Hall of India, New Delhi.
23. Sambamurty. A.V.S.S. 2006, A Text book of Algae, I. K. International Publishing House, Pvt. Ltd., New Delhi.
24. Sharma, P. D. 2012, Microbiology and Plant Pathology, Rastogi Publication Pvt Ltd., Meerut, India.
25. Singh, R. P. 2007. Microbial Taxonomy and Culture Techniques, Kalyani Publication, New Delhi.
26. Smith. G. M. 1996. Cryptogamic Botany Volume I, Tata Mc Graw Hill, New Delhi.
27. Sundar Rajan. S. 2010.College Botany Volume I, Himalaya Publications, Mumbai.
28. Vashishta, B.R. Sinha, A.K. and Singh, V. P. 1991. Algae, S. Chand and Company, Pvt. Ltd., New Delhi

This course can be opted as an elective by the students of following subjects: Open to all but special for B.Sc. Biotech, B.Sc. Microbiology, B.Sc. Agriculture, B.A. (Curators), B.A. Archaeology, B.A. Geology, BAMS.

Suggested Continuous Evaluation Methods:

Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall

Internal Assessment	Marks
Class Interaction	5
Quiz	5
Seminar	7
Assignment (Charts/ Flora/ Rural Service/ Technology Dissemination)	8
	25

Course prerequisites:

Qualification: To study this course, a student must have qualified 10+2 with Biology/ NSQF level 3 from Sector Skill Councils / Diploma holder from ITI in (Biology/ Agriculture/ Biotech/ Forestry/ Microbiology/Gardening /biomedical Science.

Facilities: Smart and Interactive Class

Other Requisites: Video collection, Books, CDs, Access to On-line resources, Display Charts

Suggested equivalent online courses:

<https://indianculture.gov.in/rarebooks/economic-botany-india>

<https://community.plantae.org/tags/mooc>

<futurelearn.com/courses/teaching-biology-inspiring-students-with-plants-in-science>

<https://www.coursera.org/courses?query=plants>

<http://egyankosh.ac.in/handle/123456789/53530>

<https://www.classcentral.com/tag/microbiology>

<https://www.edx.org/learn/microbiology>

<https://www.mooc-list.com/tags/microbiology>

<https://www.udemy.com/topic/microbiology/>

<https://ucmp.berkeley.edu/bacteria/bacteria.html>

<https://www.livescience.com/53272-what-is-a-virus.html>

<https://gclambathach.in/lms/Economic%20importance%20of%20Algae.pdf>

<https://www.slideshare.net/sardar1109/algae-notes-1>

<https://www.onlinebiologynotes.com/algae-general-characteristics-classification/>

<https://www.sciencedirect.com/topics/immunology-and-microbiology/fungus>

<https://ucmp.berkeley.edu/fungi/fungi.html>

<https://agrimoon.com/wp-content/uploads/Mashroom-culture.pdf>

<http://ecoursesonline.iasri.res.in/mod/page/view.php?id=11293>

<http://www.hillagric.ac.in/edu/coa/pplath/lect/plpath111/Lect.%201%20%20Introduction-Pl%20Path%20111.pdf>

http://www.jnkvv.org/PDF/11042020102651plant_pathology.pdf

<https://www.apsnet.org/edcenter/disimpactmngmnt/topc/EpidemiologyTemporal/Pages/ManagementStrategies.aspx>

<https://learn.saylor.org/course/view.php?id=23§ionid=6821>

<https://www.sciencedirect.com/topics/earth-and-planetary-sciences/microscopy>

http://physics.fe.uni-lj.si/students/predavanja/Microscopy_Kulkarni.pdf

<https://lipidnanostructuresgroup.weebly.com/>

<https://zoology4civilservices.wordpress.com/2016/06/18/65/>

<https://microbenotes.com/laminar-flow-hood/>

CERTIFICATE COURSE IN MICROBIAL TECHNOLOGY & CLASSICAL BOTANY / B.Sc.-I

Programme: <i>Certificate Course In Microbial Technology & Classical Botany</i>	Year: I	Semester: I/Paper-II
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Subject: **Botany**

Course Code: B040102P	Course Title: Techniques in Microbiology & Plant Pathology
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Course outcomes: After the completion of the course the students will be able:

1. Understand the instruments, techniques, lab etiquettes and good lab practices for working in a microbiology laboratory.
2. Develop skills for identifying microbes and using them for Industrial, Agriculture and Environment purposes.
3. Practical skills in the field and laboratory experiments in Microbiology & Pathology.
4. learn to identify Algae, Lichens and plant pathogens along with their Symbiotic and Parasitic associations.
5. Can initiate his own Plant & Seed Diagnostic Clinic
6. Can start own enterprise on microbial products

Credits:**2**

Core Compulsory

Max. Marks: **25+75**

Min. Passing Marks:

Total No. of Lectures-Tutorials-Practical (in hours per week): **0-0-2**

Unit	Topic * (Minimum Any three from each unit depending on facilities)	No. of Lectures (60 hrs)
1.	INSTRUMENTS & TECHNIQUES 1. Laboratory safety and good laboratory practices 2. Principles and application of Laboratory instruments-microscope, incubator, autoclave, centrifuge, LAF, filtration unit, shaker, pH meter. 3. Buffer preparation & titration 3. Cleaning and Sterilization of glasswares 4. Preparation of media- Nutrient Agar and Broth 5. Inoculation and culturing of bacteria in Nutrient agar and nutrient broth 6. Preparation of agar slant, stab, agar plate 7. Phenol Coefficient method to test the efficacy of disinfectants	7
II	BACTERIAL IDENTIFICATION 1. Isolation of bacteria. 2. Identification of bacteria. 3. Staining techniques: Gram's, Negative, Endospore, Capsule and Cell Wall. 4. Cultural characteristics of bacteria on NA. 5. Pure culture techniques (Types of streaking). 6. Biochemical characterization: IMViC, Carbohydrate fermentation test, Mannitol motility test, Gelatin liquefaction test, Urease test, Nitrate reduction test, Catalase test, Oxidase test, Starch hydrolysis, Casein hydrolysis.	8
III	MYCOLOGICAL STUDY: 1. Isolation of different fungi: Saprophytic, Coprophilous, Keratinophilic. 2. Identification of fungi by lactophenol cotton blue method. <i>Rhizopus</i> , <i>Saccharomyces</i> , <i>Penicillium</i> , <i>Peziza</i> , <i>Ustilago</i> , <i>Puccinia</i> ; <i>Fusarium</i> , <i>Curvularia</i> , <i>Alternaria</i> . 3. <i>Agaricus</i> : Specimens of button stage and full grown mushroom; Sectioning of gills of <i>Agaricus</i> . 4. Lichens: crustose, foliose and fruticose specimens.	8
IV	PHYCOLOGY: 1. Type study of algae and Cyanobacteria – <i>Spirulina</i> , <i>Nostoc</i> . Chlorophyceae - <i>Chlorella</i> , <i>Volvox</i> , <i>Oedogonium</i> , <i>Cladophora</i> , and <i>Chara</i> ; Xanthophyceae – <i>Vaucheria</i> ; Bacillariophyceae – <i>Pinnularia</i> Phaeophyceae – <i>Sargassum</i> Rhodophyceae - <i>Polysiphonia</i>	7
V	EXPERIMENTAL PLANT PATHOLOGY 1. Preparation of fungal media (PDA) & Sterilization process. 2. Isolation of pathogen from diseased leaf. Identification: Pathological specimens of Brown spot of rice, Bacterial blight of rice, Loose smut of wheat, Stem rot of mustard, Late blight of potato; Slides of uredial, telial, pycnial & aecial stages of <i>Puccinia</i> , Few viral and bacterial plant diseases.	8
VI	PRACTICALS IN APPLIED MICROBIOLOGY-1 1. Isolation of nitrogen fixing bacteria from root nodules of legumes. 2. Enumeration of rhizosphere to non rhizosphere population of bacteria. 3. Isolation of antagonistic <i>Pseudomonas</i> from soil. 4. Microscopic observations of root colonization by VAM fungi. 5. Isolation of <i>Azospirillum</i> sp. from the roots of grasses. 6. Isolation of phyllosphere microflora. 7. Isolation of P solubilizing microorganisms.	8
VII	PRACTICALS IN APPLIED MICROBIOLOGY-2 1. Wine production. 2. Isolation of lactic acid bacteria from curd. 3. Isolation of lipolytic organisms from butter or cheese. 4. Immobilized bacterial cells for production of hydrolytic enzymes. 5. Enzyme production and assay – cellulase, protease and amylase. 6. Immobilization of yeast. 7. Isolation of cellulolytic and anaerobic sulphate reducing bacteria. 8. Isolation and characterization of acidophilic, alkalophilic and halophilic bacteria.	8
VIII	1. Cultivation of <i>Spirulina</i> , & <i>Chlorella</i> in lab for biofuel 2. Visit to NBAIM, Mau, Varanasi (Kashi)/ IMTECH (Institute of Microbial Technology), Chandigarh for viewing Culture Repository 3. Visit to biofertilizers and biopesticides unit to understand about the Unit operation procedures 4. Mushroom cultivation for Protein	6

5. Alcohol production. from Sugarcane Juice.

Suggested Readings:

Course Books published in Hindi may be prescribed by the Universities.

1. [unreadable text]
2. [unreadable text]-I Dhankar - Sharma – Trivedi ISBN Code: 978-81-8142-697-0 65, RBDPublishing House Shivaji Nagar Civil Lines,Jaipur - 302006 (Rajasthan)
3. [unreadable text] : [unreadable text] : 2018
4. Practical Botany (Part I) ISBN #:81-301-0008-8 Sunil D Purohit, Gotam K Kukda & Anamika Singhvi Edition:2013 Apex Publishing House Durga Nursery Road, Udaipur, Rajasthan (bilingual)
5. Modern Mushroom Cultivation And Recipes (hindi) (hb)ISBN : 9788177545180Edition : 01Year : 2017Author : Singh Riti , Singh UCPublisher : Agrobios (India)
6. Biofertilizer Production Manual (hindi) (hb) ISBN : 9788177541274Edition : 01Year : 2014Author : Gehlot D Publisher : Agrobios (India)Language : Hindi
1. Aneja, K. R. 1993. Experiments in Microbiology, Pathology and Tissue Culture, Vishwa Prakashan, New Delhi.
2. Dubey, R. C. and Maheshwari. D.K. 2012. Practical Microbiology, S. Chand & Company, Pvt. Ltd., New Delhi.
3. Kodo, C.I. and Agarwal, H.O.1972. Principles and techniques in Plant Virology, Van Nostrand, Reinhold Company, New York.
4. Madhavee Latha, P. 2012, A Textbook of Immunology, S. Chand & Company Pvt. Ltd., New Delhi.
5. Pandey. B.P. 2014 Modern Practical Botany, (Vol-I) S. Chand and Company Pvt. Ltd., New Delhi.
6. Sambamurty. A.V.S.S. 2006, A Textbook of Algae, I. K. International Publishing House, Pvt. Ltd.,
7. Singh, R. P. 2007. Microbial Taxonomy and Culture Techniques, Kalyani Publication, New Delhi.
8. <https://agrimoon.com/wp-content/uploads/Mashroom-culture.pdf>
9. <http://nhb.gov.in/pdf/Cultivation.pdf>
10. https://www.k-state.edu/fungi/Greeting/Publications_files/2006%20Handbook.pdf
11. Sen, Surjit,Acharya, Krishnendu, Rai, Manjula 2019 IBSN - 978-93-88347-23-5 - Biofertilizers and Biopesticides .Technoworld, Kolkata
12. <http://www.kvkkendrapara.org/pdf/Bio%20Fertilizer%20Production%20and%20marketing.pdf>
13. <http://www.gbv.de/dms/tib-ub-hannover/751302945.pdf>
14. Hochman,Gal,Zilberman,David 2014 IBSN-1461493285- Algae Farming and Its Bio-Products Springer
18. Gokare A. Ravishankar , Ranga Rao Ambati 2019 Handbook of Algal Technologies and Phytochemicals Volume II: Phycoremediation, Biofuels and Global Biomass Production Print ISBN: 9780367178192
19. Amos Richmond Ph.D., Prof. Emeritus, Qiang Hu Ph.D 2013. Handbook of Microalgal Culture: Applied Phycology and Biotechnology, Second Edition Print ISBN:9780470673898

This course can be opted as an elective by the students of following subjects: Open to all but special for B.Sc. Biotech, B.Sc. Microbiology, B.Sc. Agriculture, B.A. (Curators), B.A. Archaeology, B.A. Geology, BAMS.

Suggested Continuous Evaluation Methods:

Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Internal Assessment	Marks
Class Interaction	5
Quiz	5
Seminar	7
Minor field work/excursion/lab visit/technology dissemination etc.	8

Course prerequisites:

Qualification: To study this course, a student must have qualified 10+2 with Biology/ NSQF level 3 from Sector Skill Councils / Diploma holder from ITI in (Biology/ Agriculture/ Biotech/ Microbiology/biomedical Science).

Facilities: Smart and Interactive Class

Other Requisites: Video collection, Books, CDs, Access to On-line resources, Display Charts

Lab Requisites: Microscopes, Stains, Dissection box, Haemocytometer, Specimens, Permanent slides, Autoclave, incubator, Oven, laminar flow cabinet, balances, Fermenter, Anaerobic jar and Spectrophotometer.

Suggested equivalent online courses:

<https://community.plantae.org/tags/mooc>

futurelearn.com/courses/teaching-biology-inspiring-students-with-plants-in-science

<https://microbiologysociety.org/publication/education-outreach-resources/basic-practical-microbiology-a-manual.html>

<https://microbiologyonline.org/file/7926d7789d8a2f7b2075109f68c3175e.pdf>

<http://allaboutalgae.com/benefits/>

<https://repository.cimmyt.org/xmlui/bitstream/handle/10883/3219/64331.pdf>

<https://www.mooc-list.com/tags/microbiology>

<http://www.agrifs.ir/sites/default/files/A%20text%20book%20of%20practical%20botany%201%20%207BAshok%20Bendre%207D%20%205B8171339239%5D%20%20281984%29.pdf>

<https://www.coursera.org/courses?query=plants>

<http://egyankosh.ac.in/handle/123456789/53530>

<https://www.classcentral.com/tag/microbiology>

<https://www.edx.org/learn/microbiology>

<https://www.mooc-list.com/tags/microbiology>

<https://www.udemy.com/topic/microbiology/>

Programme /Class: B.Sc.-I/ Certificate Course In Microbial Technology & Classical Botany	Year: I	Semester: II Paper-I
Subject: Botany		
Course Code: B040201T	Course Title: Archegoniates and Plant Architecture	
Course outcomes: After the completion of the course the students will be able to: <ol style="list-style-type: none"> 1. Develop critical understanding on morphology, anatomy and reproduction of Bryophytes, Pteridophytes and Gymnosperms 2. Understanding of plant evolution and their transition to land habitat. 3. Understand morphology, anatomy, reproduction and developmental changes therein through typological study and create a knowledge base in understanding the basis of plant diversity, economic values & taxonomy of plants 4. Understand the details of external and internal structures of flowering plants. 		
Credits: 4	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week): 4-0-0		

Unit	Topic	Lectures (60hrs)
I	Introduction to Archegoniates & Bryophytes Unique features of archegoniates, Bryophytes: General characteristics, adaptations to land habit, Range of thallus organization. Classification (up to family), morphology, anatomy and reproduction of <i>Riccia</i> , <i>Marchantia</i> , <i>Anthoceros</i> and <i>Sphagnum</i> . (Developmental details not to be included), economic importance of bryophytes .	7
II	Pteridophytes General characteristics, Early land plants (<i>Rhynia</i>). Classification (up to family) with examples, Heterospory and seed habit, stelar evolution, economic importance of Pteridophytes.	8
III	Gymnosperms Classification and distribution of gymnosperms; Salient features of Cycadales, Ginkgoales, Coniferales and Gnetales, their examples, structure and reproduction; economic importance	8
IV	Palaeobotany General account of Cycadofilicales, Bennettitales and Cordaitales; Geological time scale; Brief account of process of fossilization & types of fossils and study techniques ; Contribution of Birbal Sahni	8
V	Angiosperm Morphology (Stem, Roots, Leaves & Flowers, Inflorescence) Morphology and modifications of roots; Stem, leaf and bud. Types of inflorescences; flowers, flower parts, fruits and types of placentation; Definition and types of seeds.	7
VI	Plant Anatomy: Meristematic and permanent tissues, Organs (root, stem and leaf). Apical meristems & theories on apical organization - Apical cell theory, Histogen theory, Tunica - Corpus theory. Secondary growth - Root and stem- cambium (structure and function) annular rings, Anomalous secondary growth - <i>Bignonia</i> , <i>Boerhaavia</i> , <i>Dracaena</i> , <i>Nyctanthes</i>	7
VII	Reproductive Botany Plant Embryology, Structure of microsporangium, microsporogenesis, , Structure of megasporangium and its types, megasporogenesis, Structure and types of female gametophyte, types of pollination, Methods of pollination, Germination of pollen grain, structure of male gametophyte, Fertilization, structure of dicot and monocot embryo, Endosperm, Double fertilization, Apomixis and polyembryony.	8
VIII	Palynology: Pollen structure, pollen morphology, pollen allergy , Applied Palynology: Basic concepts, Palaeopalynology, Aeropalynology, Forensic palynology, Role in taxonomic evidences.	7

Suggested Readings:

Course Books published in Hindi may be prescribed by the Universities.

1. गणगुले H. S. and K. Kar 1992. College Botany Vol. I and II. (New Central Book Agency)
2. Bhatnagar, S.P. and Moitra, A. (1996). Gymnosperms. New Age International (P) Ltd Publishers, New Delhi, India.
3. Parihar, N.S. (1991). An introduction to Embryophyta. Vol. I. Bryophyta. Central Book Depot, Allahabad.
4. Rashid A (1999) An Introduction to Pteridophyta, Vikas Publishing House Pvt. Ltd. New Delhi.
5. Sharma OP (1990) Textbook of Pteridophyta. MacMillan India Ltd. Delhi.
6. Vashishtha BR, Sinha AK and Kumar A (2010) Botany for Degree Students – Pteridophyta, S. Chand and Company,
7. Vashishtha BR, Sinha AK and Kumar A (2010) Botany for Degree Students – Gymnosperms, S. Chand and
8. Parihar NS (1976) Biology and Morphology of Pteridophytes. Central Book Depot.
9. Bhatnagar SP (1996) Gymnosperms, New Age International Publisher.
10. Pandey BP (2010) College Botany Vol II S. Chand and Company, New Delhi
11. Maheswari, P. 1971. An Introduction to Embryology of Angiosperms. McGraw Hill Book Co., London
12. Bhattacharya et. al. 2007. A textbook of Palynology, Central, New Delhi.
13. Bhojwani, S.S. and S. P. Bhatnagar. 2000. The Embryology of Angiosperms (4th Ed.), Vikas Publishing House,.
14. P.K.K. Nair- A textbook of Palynology.
15. Johri, B. M. 1984. Embryology of Angiosperms. Springer-Verleg, Berlin.
16. Dutta A.C. 2016. Botany for Degree Students. Oxford University Press.
17. E.J.Eames . Morphology of Vascular Plants, Standard University Press.
18. Dickinson, W.C. (2000). Integrative Plant Anatomy. Harcourt Academic Press, USA.
19. Fahn, A. (1974). Plant Anatomy. Pergmon Press, USA.
20. Evert, R.F. (2006) Esau's Plant Anatomy: Meristems, Cells, and Tissues of the Plant Body: Their Structure, Function and Development. John Wiley and Sons, Inc.

This course can be opted as an elective by the students of following subjects: Open to all but special for B.Sc. Biotech, B.Sc. Forestry, B.Sc. Agriculture, B. Pharma, B.A. (Curators), B.A. Archaeology, B.A. Geology, BAMS

Suggested Continuous Evaluation Methods:

Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Internal Assessment	Marks
Class Interaction	5
Quiz	5
Seminar	7
Assignment (Charts/ Flora/ Rural Service/ Technology Dissemination)	8
	25

Course prerequisites:

Qualification: To study this course, a student must have qualified 10+2 with Biology/ NSQF level 4 from Sector Skill Councils / Diploma holder from ITI in (Biology/ Agriculture/ Forestry).

Facilities: Smart and Interactive Class ,wifi facility

Other Requisites: : Videos,Books, CDs, Flora, Herbarium, Access to On-line resources, Display Charts

Suggested equivalent online courses:

<https://www.anbg.gov.au/bryophyte/what-is-bryophyte.html>

<https://pteridoportal.org/portal/index.php>

<https://www.conifers.org/zz/gymnosperms.php>

<http://www.mobot.org/MOBOT/research/APweb/>

<https://milneorchid.weebly.com/plant-id-for-beginners.html>

<https://www.botany.org/PlantImages/PlantAnatomy.php>

<http://webapp1.dlib.indiana.edu/inauthors/view?docId=VAC0868&doc.view=print>

<https://palynology.org/>

<http://www2.estrellamountain.edu/faculty/farabee/biobk/Biobookflowers.html>

<https://www.sciencelearn.org.nz/resources/100-plant-reproduction>

<https://palaeobotany.org/>

Programme/Class: Certificate Course In Microbial Technology & Classical Botany		Year: I	Semester: II Paper-II (Practical)
Subject: Botany			
Course Code: B040202P		Course Title: Land Plants Architecture	
Course outcomes:			
<ol style="list-style-type: none"> The students will be made aware of the group of plants that have given rise to land habit and the flowering plants. Through field study they will be able to see these plants grow in nature and become familiar with the biodiversity. Students would learn to create their small digital reports where they can capture the zoomed in and zoomed out pictures as well as videos in case they are able to find some rare structure or phenomenon related to these plants. Develop an understanding by observation and table study of representative members of phylogenetically important groups to learn the process of evolution in a broad sense. Understand morphology, anatomy, reproduction and developmental changes therein through typological study and create a knowledge base in understanding plant diversity, economic values & taxonomy of lower group of plants Understand the composition, modifications, internal structure & architecture of flowering plants for becoming a Botanist. 			
Credits: 2		Core Compulsory	
Max. Marks: 25+75		Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week): 0-0-2			
Unit	Topic	No. of Lectures	
I	Bryophytes: Marchantia- morphology of thallus, W.M. rhizoids and scales, V.S. thallus through Gemma cup, W.M. gemmae (all temporary slides), V.S. antheridiophore, archegoniophore, L.S. sporophyte (all permanent slides). <i>Sphagnum</i> - morphology, W.M. leaf, rhizoids, operculum, peristome, annulus, spores (temporary slides); permanent slides showing antheridial and archegonial heads, L.S. capsule and protonema.	8	
II	Pteridophytes: <i>Lycopodium</i> : Habit, stem T. S. stobilus V. S., <i>Selaginella</i> : Habit, rhizophore T. S, stem T. S, axis with strobilus, V.S. of strobilus, Megasporephyll and microsporephyll. <i>Equisetum</i> - Habit, rhizome and stem T.S. and V. S. of strobilus. <i>Azolla</i> – Habitat & its structure	7	
III	Gymnosperms 1. <i>Cycas</i> – seedling, coralloid root and coralloid root T. S., T. S. of leaflet and Rachis, micro and megasporephyll, male cone V. S., microsporephyll T. S. entire and V. S. of ovule. <i>Pinus</i> - Branch of indefinite growth, spur shoot, T. S of old stem and needle R.L.S and T. L. S. of stem, male and female cone, V.S. of male and female cone. 2. <i>Ephedra & Thuja</i> : Habit, stem T. S (young and mature), leaf T. S, male and female strobilus, V. S. of male and female cone, ovule V. S. and seed.	8	
IV	Palaeobotany & Palynology 1. Morphology of <i>Rhynia</i> and fossils gymnosperms & other groups. 2. Visit Birbal Sahni Institute of Palaeosciences or virtual conference with their scientists to learn fossilization. 3. Mark and know about Indian geographical sites rich in plant fossils.	6	
V	Angiosperm Morphology 1. To study diversity in leaf shape, size and other foliar features. 2. To study monopodial and sympodial branching. 3. Morphology of Fruits 4. Inflorescence types- study from fresh/ preserved specimens 5. Flowers- study of different types from fresh/ preserved specimens 6. Fruits- study from different types from fresh/preserved specimens 7. Study of ovules (permanent slides/ specimens/photographs)- types (anatropous, orthotropous, amphitropous and campylotropous) 8. Modifications in Roots, stems, leaves and inflorescences	8	

VI	Plant Anatomy: Normal & Anomalous secondary thickening - <i>Bignonia, Dracaena, Boerhaavia diffusa, Nyctanthes</i> Study of primary and secondary growth in the root and stem of monocots and dicots by section cutting and permanent slides. Study of internal structure of dicot and monocot leaves. Study of structure of stomata.	8
VII	Reproductive Botany 1. Structure of anther, microsporogenesis and pollen grains 2. Structure of ovule and embryo sac development (through slides). 3. Study of embryo development in monocots and dicots. 4. Vegetative propagation by means of cutting, budding and grafting exercises. 5. Study of seed germination. 6. Study of pollen morphology of the following plants – <i>Hibiscus, Vinca, Balsam, Ixora, Crotalaria, Bougainvillea</i> by microscopic observation. 7. Calculation of pollen viability percentage using in vitro pollen germination techniques.	8
VIII	Commercial Uses and Production technology 1. <i>Azolla</i> production 2. Production technology of Resins 3. Production and propagation of Ornamental <i>Pteris</i> , Cycadales, Coniferales for landscaping. 4. Lab method for qualitative testing/ extraction of Ephedrine, Taxol and <i>Thuja</i> oil.	7

Suggested Readings:

Course Books published in Hindi may be prescribed by the Universities.

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Pandey, BP and Trivedi, P.S. 1997. Botany Vol. I(10th edition). Vikas Publishing House.
 Pandey, BP; Misra; Trivedi, P.S. 1997. Botany Vol. II. Vikas Publishing House.
 Pandey, BP and Chadha. 1997. Botany Vol. III. Vikas Publishing House.
 Santra, SC and Chatterjee. 2005. College Botany Practical Vol. I. New Central Book Agency (P) Ltd.
 Kumar, S and Kashyap. 2003. Manual of Practical Algae. Campus Books International, New Delhi
 Bendre and Kumar A text book of Practical Botany. Vol I,II., Rastogi Pub. Meerut.
 Suresh Kumar, Amar Singh Kashyap Manual of Practical Algae.. Campus Books Internet, New Delhi.
 Santra, SC. 2005. College Botany Practical Vol. II. New Central Book Agency (P) Ltd.

This course can be opted as an elective by the students of following subjects:

Open to all but special for B.Sc. Biotech, B.Sc. Forestry, B.Sc. Agriculture, B. Pharma, B.A.

Suggested Continuous Evaluation Methods:Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Internal Assessment	Marks
Class Interaction	6
Field work /Virtual/E-learning /Participation in group discussions	7
Industrial or Central laboratory training of two weeks in summer/winter (Compulsory)	12
	25

Course prerequisites:

Qualification: To study this course, a student must have qualified 10+2 with Biology/ NSQF level 3 from Sector Skill Councils / Diploma holder from ITI in (Biology/ Agriculture/ Forestry).

Facilities: Smart and Interactive Class

Other Requisites: Microscopes, Stains, Dissection box, Haemocytometer, Specimens, Permanent slides, Autoclave, incubator, Oven, laminar flow cabinet, balance

Suggested equivalent online courses:

<https://www.easybiologyclass.com/topic-botany>

<http://www3.botany.ubc.ca/bryophyte/index.html>

http://ecflora.cavehill.uwi.edu/bio_courses/bl14apl/practical_3.1.htm

<http://mydunotes.blogspot.com/p/botany.html>

<http://www.fao.org/3/a-v9236e.pdf>

<https://iinrg.icar.gov.in/library/nrg/nrg.pdf>

https://agritech.tnau.ac.in/banking/nabard_pdf/Azolla%20Cultivation/Model_project_on_Azolla_cultivation.pdf

<http://arnoldia.arboretum.harvard.edu/pdf/articles/1977-37-1-propagation-manual-of-selected-gymnosperms.pdf>

https://www.fs.fed.us/rm/pubs_other/wo_AgricHandbook730/wo_AgricHandbook727_153_175.pdf

***Detail Syllabus of
B.Sc.-II Year
or
Diploma in
Plant Identification, Utilization & Ethnomedicine***

Diploma in Plant Identification, Utilization & Ethnomedicine

Diploma in Plant Identification, Utilization & Ethnomedicine		
Programme /Class: <i>Diploma in Plant Identification, Utilization & Ethnomedicine</i>	Year: II	Semester: III Paper-I
Subject: Botany		
Course Code: B040301T	Course Title: Flowering Plants Identification & Aesthetic Characteristics	
<p>Course outcomes: After the completion of the course the students will be able to:</p> <ol style="list-style-type: none"> 1. To gain an understanding of the history and concepts underlying various approaches to plant taxonomy and classification. 2. To learn the major patterns of diversity among plants, and the characters and types of data used to classify plants. 3. To compare the different approaches to classification with regard to the analysis of data. 4. To become familiar with major taxa and their identifying characteristics, and to develop in depth knowledge of the current taxonomy of a major plant family. 5. To discover and use diverse taxonomic resources, reference materials, herbarium collections, publications. 6. For the entrepreneur career in plants, one can establish a nursery, Start a landscaping business, Set up a farm Or Run a plantation consultancy firm 		
Credits: 4	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week): 4-0-0		
Unit	Topic	No. of Lectures (60hrs)
I	<p>Taxonomic Resources & Nomenclature Components of taxonomy (identification, nomenclature, classification) ; Taxonomic resources: Herbarium- functions & important herbaria, Botanical gardens, Flora, Keys- single access and multi-access. Principles and rules of Botanical Nomenclature according to ICN (ranks and names; principle of priority, binomial system; type method, author citation, valid-publication).</p>	7
II	<p>Types of classification & Evidences Artificial, natural and phylogenetic. Bentham and Hooker (upto series), Engler and Prantl (upto series) angiosperm phylogeny group (APG IV) classification. Introduction to taxonomic evidences from palynology, cytology, phytochemistry & Molecular biology data (Protein and Nucleic acid homology).</p>	8
III	<p>Identification of Angiospermic families -I: (Families can be chosen University wise as per local available flora) A study of the following families with emphasis on the morphological peculiarities and economic importance of its members (based on Bentham & Hooker's system) Ranunculaceae, Malvaceae, Rutaceae, Fabaceae, Myrtaceae , Cucurbitaceae, Rubiaceae, Asteraceae, Apocynaceae, Acanthaceae, Asclepiadaceae, Solanaceae.</p>	8
IV	<p>Identification of Angiospermic families -II: (Families can be chosen University wise as per local available flora) A study of the following families with emphasis on the morphological peculiarities and economic importance of its members (based on Bentham & Hooker's system)- Amaranthaceae, Euphorbiaceae, Papaveraceae, Apiaceae, Lamiaceae, Orchidaceae, Liliaceae, Musaceae, Poaceae.</p>	7

V	Modern trends in Plant taxonomy: Brief idea on Phenetics, Biometrics, Cladistics (Monophyletic, polyphyletic and paraphyletic groups; Plesiomorphy and apomorphy).	8
VI	TOOLS & SOFTWARES IN PLANT IDENTIFICATION- GIS (Mapping of (i) Patterns(ii) Features (iii) Quantities 0P02.010H11YLIP - Free Phylogenetic Software, Digital Taxonomy (e-flora), Description Language for Taxonomy – DELTA Internet directory for botany.	7
VII	Computer usage & Android Applications MS Office: PPT, Microsoft Excel, data entry, graphs, aggregate functions, formulas and functions, number systems, conversion devices, secondary storage media. GPS tagging, Plant Identification Apps.	7
VIII	Aesthetic Characteristics of Plants: Aesthetic characteristics of plants, English, Italian, French, Persian, Mughal and Japanese gardens; Features of a garden (Garden wall, Fencing, Steps, Hedge, Edging, Lawn, Trees, shrubs and shrubberies, climbers and creepers, rockery, Flower beds, Shrubbery, Borders, Water garden). Some Famous gardens of India. Conservatory, green houses, Indoor garden, Roof garden, Topiary, Bonsai.	8

Suggested Readings:

Course Books published in Hindi may be prescribed by the Universities.

1. [unclear] [unclear] [unclear] ([unclear] [unclear] , [unclear] [unclear] [unclear] [unclear] [unclear]) [unclear] - [unclear] , [unclear] [unclear] [unclear] [unclear] : [unclear] [unclear] [unclear] [unclear] , [unclear]
2. [unclear] [unclear] [unclear] [unclear] [unclear] [unclear] . [unclear] . [unclear] [unclear] [unclear] [unclear] [unclear]
3. Propagation And Nursery Management (hindi) (hb) ISBN : 9788177546200 Edition : 01 Year : 2016 Author : Pandey S.K. , Soni N. Publisher : Agrobios (India)
4. Dr. Amar Singh. पौधपरिचय - Plant Taxonomy (An Old and Rare Book) from the category Ayurveda in our Books collection. Uttar Pradesh Hindi Sansthan, Lucknow

1. Plant Systematics. Arun K. Pandey & Shruti Kansana. 2020. Jaya Publishing House.
2. Bole, P. V. and Vaghani, Y. (1986) Field guide to the common trees of India. Oxford University Press; Bombay.
3. Brandis, D. (1906) Indian Trees (London, 5th edition. 1971). International Book Distributors; Dehra Dun.
4. Dallwitz, M. J., Paine, T. A. and Zurcher, E. J. (2003). Principles of interactive keys. <http://delta-intkey.com>
5. <https://www.naace.co.uk/school-improvement/ict-mark/>
6. <https://www.socitm.gov.uk>, (2002) Learning in the 21st century Executive briefing A Socitm Insight publication, July 2002 Socitm.
7. K. B. Anjaria, (2015) "Electronic Herbarium and Digital Database Preparation of Common Trees of Anand District, Gujarat" MRP submitted to UGC, WRO, Pune 2015 (unpublished)
8. Lizeron Eremias and R. Subash. (2013) "E-Content Development: A Milestone In The Dynamic Progress Of E-Learning" International Journal of Teacher Educational Research (IJTER) Vol.2 No.1 January, 2013 ISSN: 2319- 4642
9. Pandey, B.P. 2007. Botany for Degree Students: Diversity of Seed Plants and their Systematics, Structure, Development and Reproduction in Flowering Plants. S. Chand & Company Ltd, New Delhi.
10. Stace, C. A. 1989. Plant Taxonomy and Biostatistics (2nd Ed.). Edward Arnold, London.
11. Singh, G. 1999. Plant Systematics: Theory and Practice. Oxford and IBH, New Delhi.
12. Dutta A.C. 2016. Botany for Degree Students. Oxford University Press.
13. Davis, P. H. and V. H. Heywood. 1963. Principles of Angiosperm Taxonomy. Oliver and Boyd, London.
14. Heywood, V. H. and D. M. Moore (Eds). 1984. Current Concepts in Plant Taxonomy. Academic Press, London.
15. Austin, R. 2002. Elements of planting design. New York: John Wiley & Sons.
16. Bertauski, T. 2005. Designing the landscape: An introductory guide for the landscape designer. Upper Saddle River, NJ: Pearson Prentice Hall.
17. Thomas, H., and S. Wooster. 2008. The complete planting design course: Plans and styles for every garden. London: Octopus Publishing Group.
18. Scarfone, S. 2007. Professional planting design: An architectural and horticultural approach for creating mixed bed plantings. New York: John Wiley & Sons.
19. Randhawa, G.S. and Mukhopadhyay, A. 1986. Floriculture in India. Allied Publishers.

This course can be opted as an elective by the students of the following subjects: Open to all but special for B.Sc. Biotech B.Sc. Forestry, B.Sc. Agriculture, B. Pharma, B.A. (Curators), B.A. Archaeology, B.A. Geology, BAMS

Suggested Continuous Evaluation Methods:

Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Internal Assessment	Marks
Class Interaction	5
Quiz	5
Seminar	7
Assignment (Charts/ Flora/ Rural Service/ Technology Dissemination)	8
	25

Course prerequisites:

Qualification: To study this course, a student must have qualified 10+2 with Biology/ NSQF level 3 from Sector Skill Councils / Diploma holder from ITI in (Biology/ Agriculture/ Forestry).

Facilities: Smart and Interactive Class

Other Requisites: : Video collection, Books, CDs, Flora, Herbarium, Access to On-line resources, Display Charts

Suggested equivalent online courses:

<https://www.easybiologyclass.com/topic-botany/>

<http://egyankosh.ac.in/handle/123456789/53530> <https://www.delta-intkey.com/www/desc.htm>

<https://milneorchid.weebly.com/plant-id-for-beginners.html>

<https://plants.usda.gov/classification.html>

https://www.senecaohs.org/pages/uploaded_files/Plant%20Classification.pdf

https://www.ladykeanecollege.edu.in/files/userfiles/file/Dr_%20S_%20Nongbri%20III%20Sem%20ppt.pdf

https://www.brainkart.com/article/Bentham-and-Hooker-s-classification-of-plants---Dicotyledonae,-Gymnospermae-and-Monocotyledonae_1000/

<https://libguides.rutgers.edu/c.php?g=336690&p=2267037>

<https://www.delta-intkey.com/>

Programme/Class: : Diploma in Plant Identification, Utilization & Ethnomedicine		Year: II	Semester: III Paper-II (Practical)
Subject: Botany			
Course Code: B040302P		Course Title: Plant Identification technology	
<p>Course outcomes: After the completion of the course the students will be able:</p> <ol style="list-style-type: none"> To learn how plant specimens are collected, documented, and curated for a permanent record. To observe, record, and employ plant morphological variation and the accompanying descriptive terminology. To gain experience with the various tools and means available to identify plants. To develop observational skills and field experience. To identify a taxonomically diverse array of native plants. To recognize common and major plant families. To Understand aesthetic characters of flowering plants by making-landscapes,gardens,bonsai,miniatures Comprehend the concepts of plant taxonomy and classification of Angiosperms. 			
Credits: 2		Core Compulsory	
Max. Marks: 25+75		Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week): 0-0-2			
Unit	Topic* *(Perform Any three experiments from each unit as per facility)		No. of Lecture (60Hrs)
I	<p>Herbarium: Plant collecting, Preservation and Documentation: Stepwise Practicing Herbarium techniques: a. FIELD EQUIPMENTS, Global Positioning System (GPS) instrument & Collection of any wild 25 plant specimens b. Learn to handle Herbarium making tools c. Pressing and Drying of collected plant specimens d. Special treatments for all varied groups of plants e. Mount on standard herbarium sheets f. Label them using Standard method g. Organize them and give Index Register Number</p>		7
II	<p>Taxonomic Identification using plant structure a. Classify 25 plants on the basis of Taxonomic description (Plant Morphology, Anatomy, Reproductive parts, Habit, adaptation anomalies) according to Bentham and Hooker natural system of classification in the following families: Malvaceae, Fabaceae (Papilionaceae), Solanaceae, Scrophulariaceae, Acanthaceae, Labiatae (Lamiaceae), Rubiaceae.</p>		8
III	<p>Identification during excursions a. Conducting Spot identification (Binomial, Family) of common wild plants from families included in the theoretical syllabus (list to be provided) and making FIELD NOTE BOOK and filling Sample of a page of field-book, used in Botanical Survey of India. b. Describe/compare flowers in semi-technical language giving V.S. of flowers, T.S. of ovaries, floral diagrams and Floral Formulae. Identify and assign them to their respective families giving reasons.</p>		8
IV	COLLECTION, PRESERVATION AND STORAGE OF ALGAE, FUNGI BRYOPHYTES, PTERIDOPHYTES (Two each)		7
V	<p>Botanical Nomenclature & reporting Method: a. Give nomenclature to collected plants as per ICN rules and prepare labels as per BSI b. Author Citation, Effective Publication and Principle of Priority: To show a specimen paper on Basic structure of a taxonomic Research published on a new species in taxonomic journal</p>		7
VI	COMPUTERS 1. Learning to use EXCEL Microsoft PowerPoint and Word., WORKING WITH FOLDER AND WINDOWS UTILITY., CREATE AND MANAGE FILES AND FOLDER TREE,		7

	<p>Delhi.</p> <p>19. Bridson, D. & L. Forman. eds. 1998. The Herbarium Handbook. 3rd ed. Royal Botanic Gardens, Kew (Reprinted 1999).</p> <p>20. De Vogel, E.F. 1987. Manual of Herbarium Taxonomy: Theory and Practice. UNESCO, Jakarta.</p> <p>21. Fosberg, F.R. & M.-H. Sachet. 1965. Manual for tropical herbaria. Int. Bur. Pl. Tax. & Nom., Regnum Vegetabile Vol. 39. Utrecht.</p> <p>22. Jain, S.K. & R.R. Rao. 1977. A handbook of field and herbarium methods. Today & Tomorrow's Printer and Publishers, New Delhi.</p> <p>23. Victor, J.E., M. Koekemoer, L. Fish, S.J. Smithies, M. Mossmer. 2004. Herbarium essentials: the Southern African Herbarium user manual. Southern African Botanical Diversity Network Report No. 25. SABONET, Pretoria.</p>										
	<p>This course can be opted as an elective by the students of the following subjects: Open to all but special for B.S Biotech, B.Sc. Forestry, B.Sc. Agriculture, B. Pharma, B.A. (Curators), B.A. Archaeology, B.A. Geology, BAMS</p>										
	<p>Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:</p> <table border="1"> <thead> <tr> <th>Internal Assessment</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>Class Interaction</td> <td>5</td> </tr> <tr> <td>Botanical Excursion- compulsory</td> <td>12</td> </tr> <tr> <td>Assignment</td> <td>8</td> </tr> <tr> <td></td> <td>25</td> </tr> </tbody> </table>	Internal Assessment	Marks	Class Interaction	5	Botanical Excursion- compulsory	12	Assignment	8		25
Internal Assessment	Marks										
Class Interaction	5										
Botanical Excursion- compulsory	12										
Assignment	8										
	25										
	<p>Course prerequisites: Qualification: To study this course, a student must have qualified 10+2 with Biology/ NSQF level 3 from Sector Skill Councils / Diploma holder from ITI in (Biology/ Agriculture/ Forestry). Facilities: Smart and Interactive Class Other Requisites: : Video collection, Books, CDs, Flora, Herbarium, Access to On-line resources, Display Charts Lab Requisites: Microscopes (Compound, Stereo) Dissection box, stain, Herbarium, Herbarium press, Dryers, Grinder, Reference Flora</p>										
	<p>Suggested equivalent online courses:</p> <ol style="list-style-type: none"> 1. http://egyankosh.ac.in/bitstream/123456789/13096/1/Unit-5.pdf 2. https://www.for.gov.bc.ca/hfd/pubs/docs/wp/wp18.pdf 3. https://www.researchgate.net/publication/267510854 The Flowering Plants Handbook <p>Any Other :</p> <p>Botanical Excursions: One teacher along with a batch not more than 7 students be taken for botanical excursion to places of Botanical interest, one in each term. If there are female students in a batch of 7 students, one additional lady teacher is permissible for excursion.</p> <p>Each excursion will not be more than SEVEN days during college working days. T.A. and D.A. for teachers and non-teaching staff participating in excursions should be paid as per rules. Tour report duly certified by tour in charge teacher and Head of the Department should be submitted at the time of practical examination. For every study tour take the prior permission of the head of the department and Principal.</p> <p>The marks will be counted under Internal assessment and external assessment both. In external assessment student will have to present his excursion report along with industrial training/central labs visits and BSI or Museum visits. In internal assessment he shall have to label the campus plants with botanical details/develop herbal/floristic garden/conserved plants in botanical garden/contribute specimens via collection .</p>										

	<p>A project supported along with photographs taken during field study to be submitted giving comprehensive idea about different types of inflorescence, flowers and fruits/ At least three field excursions at hills/Oceans/Deserts including one Compulsory excursion to Botanical Garden, FRI/BSI and Central National Herbarium (CNH). Central Research Institutes/Hot Spots</p>	
Programme /Class: Diploma in Plant Identification, Utilization & Ethnomedicine	Year: II	Semester: IV Paper-I
Subject: Botany		
Course Code: B040401T	Course Title: Economic Botany, Ethnomedicine and Phytochemistry	
<p>Course outcomes: After the completion of the course the students will be able to:</p> <ol style="list-style-type: none"> 1. Understand about the uses of plants –will know one plant-one employment 2. Understand phytochemical analysis related to medicinally important plants and economic products produced by the plants 3. know about the importance of Medicinal plants and its useful parts, economically important plants in our daily life and also about the traditional medicines and herbs, and its relevance in modern times. 		
Credits: 4		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks:
Total No. of Lectures-Tutorials-Practical (in hours per week): 4-0-0		
Unit	Topic	No. of Lectures (60hrs)
I	<p>Origin and domestication of cultivated plants Centers of diversity of plants, origin of crop plants. Domestication and introduction of crop plants. Concepts of sustainable development; cultivation, production and uses of Cereals, legumes, Spices & beverages.</p>	7
II	<p>Botany of oils, Fibers, timber yielding plants & dyes Study of the plants with Botanical names, Family, part used, and economic uses yielding Edible & essential oils; Sugar, Starch; Fibers; Paper, Fumitories & Masticatories, Rubber, Dyes, Timber, biofuel crops.</p>	7
III	<p>Commercial production of Flowers, Vegetables, and fruits (To be Chosen area wise) Commercial greenhouse cultivation of rose, Gerbera, Gladiolus, Anthurium/lilium/lily, tomato, bell pepper, cucumber, strawberry & Exotic leafy vegetables using Hydroponics.</p>	7
IV	<p>IPR & Traditional Knowledge IPR and WTO (TRIPS, WIPO), Patent Act 1970 and its amendments, TIFAC, NRDC, Rights, Procedure of obtaining patents, Working of patents, Infringement, Copyrights, Trademarks, Geographical Indications, Traditional Knowledge Digital Library, Protection of Traditional Knowledge & Protection of Plant Varieties and Biotech inventions.</p>	8
V	<p>Ethnobotany Methodologies of ethnobotanical research: Field work, Literature, Herbaria and Musea and other aspects of ethnobotany. Importance of ethnobotany in Indian systems of medicine (Siddha, Ayurveda and Unani), Role of AYUSH, NMPB, CI-MAP and CARI. Tribal knowledge towards disease diagnosis, treatment, medicinal plants, plant conservation and cultivation.</p>	8
VI	<p>Medicinal aspects Study of common plants used by tribes (<i>Aegle marmelos</i>, <i>Ficus religiosa</i>, <i>Cynodon dactylon</i>, <i>Eclipta alba</i>, <i>Oxalis</i>, <i>Ocimum sanctum</i> and <i>Trichopus zeylanicus</i>) Ethnobotanical aspect of conservation and management of plant resources, Preservation of primeval forests in the form of sacred groves of individual species and Botanical uses depicted in our epics.</p>	8

	Plants in primary health care: common medicinal plants: <i>Tinospora, Acorus, Ocimum, Turmeric</i> and <i>Aloe</i> . Indian Pharmacopeia, Quality Evaluation of crude drugs & adulteration	
VII	Pharmacognosy Preparation of drugs for commercial market - Organoleptic evaluation of drugs - Microscopic evaluation of drugs - Physical evaluation of drugs - Active and inert constituents of drugs - Classification of drug plants - individual drugs - drug adulteration. Sources of crude drugs – roots, rhizome, bulb, corm, leaves, stems, flowers, fruits and seeds ; organoleptic study of <i>Adhatoda vasica, Andrographis paniculata, Azadirachta indica, Coriandrum sativum, Datura metel, Eclipta alba, Emblica officinalis, Ocimum sanctum, Phyllanthus amarus, Ricinus communis, Vinca rosea</i> and <i>Zingiber officinale</i> .	8
VIII	Herbal Preparations & Phytochemistry : Collection of wild herbs - Capsules - compresses - Elixirs - Glycerites - Hydrotherapy or Herbal bath - Herbal oils - Liquid extracts or Tincture - Poultices - Salves - Slippery elm slurry and gruel - Suppositories - Teas. Plant natural products , general detection, extraction and characterization procedures. Glycosides and Flavonoids and therapeutic applications. Anthocyanins and Coumarins and therapeutic applications, Lignans, Terpenes, Volatile oils and Saponins, Carotenoids and Alkaloids Carotenoids and pharmacological activities.	7

Suggested Readings:

Course Books published in Hindi may be prescribed by the Universities.

1. [Hindi text] [Hindi text] ([Hindi text] , [Hindi text] , [Hindi text]) [Hindi text] - [Hindi text], [Hindi text] [Hindi text] : [Hindi text] [Hindi text], [Hindi text]
2. [Hindi text] [Hindi text], [Hindi text] [Hindi text] [Hindi text]. [Hindi text]. [Hindi text] [Hindi text] [Hindi text] [Hindi text]
3. [Hindi text] [Hindi text] [Hindi text] [Hindi text] [Hindi text] - Dhankar - Sharma – Trivedi
4. Aushdhiye Poudhe (Hindi) by R.P. Sharma | 1 January 2013 YKING BOOKS

1. Kochhar, S.L. (2011). Economic Botany in the Tropics, MacMillan Publishers India Ltd., New Delhi. 4th edition.
2. Sambamurthy, AVSS & Subrahmanyam, NS (2000). Economic Botany of Crop Plants. Asiatech Publishers. New Delhi.
3. Singh, D.K and K.V. Peter. 2014. Protected cultivation of horticultural crops. New India Publishing Agency, India.
4. Reddy P. Parvatha. 2016. Sustainable crop protection under protected cultivation. Springer, Singapore.
5. Amit Deogirikar. 2019. A Text Book on Protected Cultivation and Secondary Agriculture. Rajlaxmi Prakashan, Aurangabad, India.
6. Singh, B., B. Singh, N. Sabir and M Hasan. 2014. Advances in protected cultivation. New India Publishing Agency, India.
7. Sharma, OP. 1996. Hill's Economic Botany (Late Dr. AF Hill, adopted by OP Sharma). Tata McGraw Hill Co. Ltd., New Delhi.
8. Joe J. Hanan. 1997. Greenhouses: Advanced Technology for protected horticulture. CRC Press.
9. Krishnamurthy, K.V. (2004). An Advanced Text rbook of Biodiversity - Principles and Practices. Oxford and IBH Publications Co. Pvt. Ltd. New Delhi
10. N.K. Acharya: Textbook on intellectual property rights, Asia Law House (2001).
11. Manjula Guru & M.B. Rao, Understanding Trips: Managing Knowledge in Developing Countries, Sage Publications (2003).
12. P. Ganguli, Intellectual Property Rights: Unleashing the Knowledge Economy, Tata McGraw-Hill (2001).
13. Arthur Raphael Miller, Micheal H. Davis; Intellectual Property: Patents, Trademarks and Copyright in a Nutshell, West Group Publishers (2000).
14. Jayashree Watal, Intellectual property rights in the WTO and developing countries, Oxford University Press, Oxford.
15. Jain, S. K. and V. Mudgal. 1999. A Handbook of Ethnobotany. Bishen Singh Mahendra Pal Singh, Dehradun.
16. Jeffrey, C. 1982. An Introduction to Plant Taxonomy. Cambridge University Press, Cambridge. London.
17. Joshi, S. G. 2000. Medicinal Plants. Oxford and IBH, New Delhi.
18. Kokate, C. and Gokeale- Pharmacognacy- Nirali Prakashan, New Delhi.
19. Lad, V. 1984. Ayurveda – The Science of Self-healing. Motilal Banarasidass, New Delhi.
20. Lewis, W. H. and M. P. F. Elwin Lewis. 1976. Medical Botany. Plants Affecting Man's Health. A Wiley Inter science Publication. John Wiley and Sons, New York.
21. Farooqui, A. A. and Sreeraman, B. S. 2001. Cultivation of medicinal and aromatic crops. Universities Press.
22. Harborne, J. B. 1998. Phytochemical methods – a guide to modern techniques of plant analysis 3 rd edition, Chapman and Hall.
23. Yesodha, D., Geetha, S and Radhakrishnan, V. 1997. Allied Biochemistry. Morgan publications, Chennai. 1. Gurdeep Chatwal, 1980. Organic chemistry of natural productis. Vol. I. Himalaya Publishing house.
24. Kalsi, P. S. and Jagtap, S., 2012. Pharmaceutical medicinal and natural product chemistry. N.K. Mehra for Narosa Publishing House Pvt. Ltd. New Delhi.
25. Wallis, T. E. 1946. Text book of Pharmacognosy, J & A Churchill Ltd.

26. Roseline, A. 2011. Pharmacognosy. MJP Publishers, Chennai.
27. Jain S. K. 1989. Methods and approaches in Ethnobotany, Society of Ethnobotanists, Lucknow.
28. Sharol Tilgner, N. D. 1999. Herbal medicine - From the heart of the earth. Edn. 1, Printed in the USA by Malloy Lithographing Inc.
29. Pal, D.C. & Jain, S.K., 1998. Tribal Medicine. Naya Prakash Publishers, Calcutta.
30. Datta & Mukerji, 1952. Pharmacognosy of Indian roots of Rhizoms drugs. Bulletin No.1 Ministry of Health, Govt. of India.
31. Young Ken, H.W., 1948. Text Book of Pharmacognosy. Blakiston C., Philadelphia.
32. Shukla, R.S., 2000. Forestry for tribal development. A.H. Wheeler & Co. Ltd., India.
33. Raychudhuri, S.P., 1991. (Ed.) Recent advances in Medicinal aromatic and spice crops. Vol.1, Today & Tomorrow's printers and publishers, New Delhi.
34. Bajpai, P.K. 2006. Biological Instrumentation and methodology. S. Chand & Co. Ltd.
35. K. Wilson and J. Walker Eds. 2005. Biochemistry and Molecular Biology. Cambridge University Press.
36. k. Wilson and KH Goulding. 1986. Principles and techniques of Practical Biochemistry. (3 edn Edward Arnold, London.

This course can be opted as an elective by the students of following subjects: Open to all but special for B.Sc. Biotech, B.Sc. Forestry, B.Sc. Agriculture, B. Pharma, B.A. (Curators), B.A. Archaeology, B.A. Geology, BAMS

Suggested Continuous Evaluation Methods:

Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Internal Assessment	Marks
Class Interaction	5
Quiz	5
Seminar	7
Assignment (Charts/ Flora/ Rural Service/ Technology Dissemination)	8
	25

Course prerequisites:

Qualification: To study this course, a student must have qualified 10+2 with Biology/ NSQF level 3 from Sector Skill Councils / Diploma holder from ITI in (Biology/ Agriculture/ Forestry).

Facilities: Smart and Interactive Class

Other Requisites: : Video collection, Books, CDs, Flora, Herbarium, Access to On-line resources, Display Charts

Suggested equivalent online resources:

https://www.pnas.org/content/104/suppl_1/8641

<https://www.journals.uchicago.edu/doi/pdfplus/10.1086/659998>

<https://bsi.gov.in/page/en/ethnobotany>

<http://www.legalserviceindia.com/article/198-Intellectual-Property-and-Traditional-knowledge.html>

https://www.brainkart.com/article/Economic-importance-Plants---Food,-Rice,-Oil,-Fibre,-Timber-yielding-plant_1095/

<https://www.loc.gov/rr/scitech/tracer-bullets/economic-botanytb.html>

<http://nsdl.niscair.res.in/bitstream/123456789/127/1/Fibre%20crops%2C%20bamboo%2C%20timber%20-%20Final.pdf>

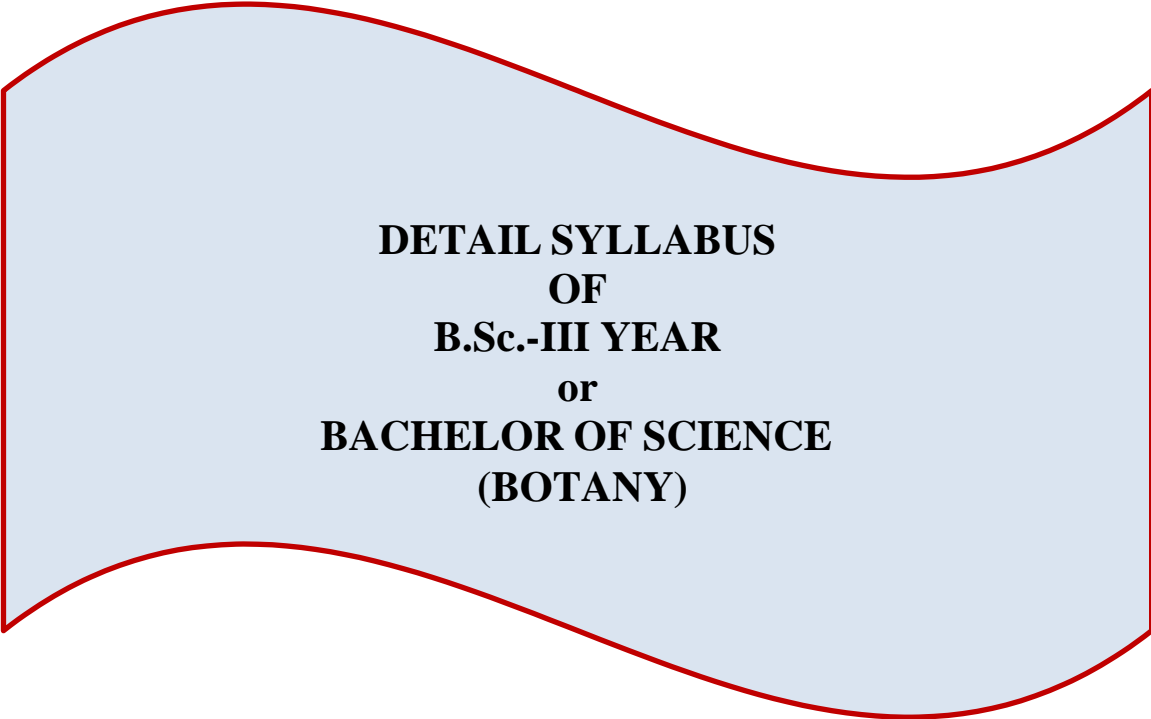
<https://www2.palomar.edu/users/warmstrong/econpls.htm>

<https://www.longdom.org/proceedings/phytochemistry-and-phytoconstituents-of-herbal-drugs-and-formulations-1668.htm>

Programme: <i>Diploma in Plant Identification, Utilization & Ethnomedicine</i>		Year: II	Semester: IV Paper-II
Subject: Botany			
Course Code: B040402P		Course Title: Commercial Botany & Phytochemical Analysis	
Course outcomes: After the completion of the course the students will be able to:			
1. Know about the commercial products produced from plants. 2. Gain the knowledge about cultivation practices of some economic crops. 3. Understand about the ethnobotanical details of plants. 4. Learn about the chemistry of plants & herbal preparations 5. Can become a protected cultivator, aromatic oil producer, Pharmacologist or quality analyst in drug company.			
Credits: 2		Core Compulsory	
Max. Marks: 25+75		Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week): 0-0-2			
Unit	Topic (Perform minimum any three experiments from each unit)		No. of Lectures (60hrs)
I	Economic Botany & Microtechnique: Cereals: Wheat (habit sketch, L.S./T.S. of grain, starch grains, micro-chemical tests); rice (habit sketch, study of paddy and grain, starch grains, micro-chemical tests) Legume: Pea or ground nut (habit, fruit, seed structure, micro-chemical tests) Source of sugars and starches: Sugarcane (habit sketch; cane juice- micro-chemical tests); potato (habit sketch, tuber morphology, T.S. of tuber to show localization of starch grains, W.M. of starch) grains, micro-chemical tests. Tea- tea leaves, tests for tannin Mustard- plant specimen, seeds, tests for fat in crushed seeds Timbers: section of young stem. Jute- specimen, transverse section of stem, tests for lignin on T.S. of stem and study of fiber following maceration technique. Study of specimens of economic importance mentioned in Unit I-& II		8
II	Commercial Cultivation Field visit to Green houses for understanding Floriculture & vegetables production Development of hydroponics nutrient solutions & running models for cultivation of vegetables Development of hydroponics nutrient solutions & running models for cultivation of fodder		8
III	Cultivating Medicinal and aromatic plants & Essential oil extraction a. Lemon grass/ Neem/ Zinger /Rose/Mint		7
IV	Documentation from Traditional Knowledge Digital Library, Mark the Geographic Indications on Map, Understand –Nakshtra Vatika, Navgrah vatika and develop in your college To extract the names of the plants and Botanical uses depicted in our epics. Visit NISCAIR, New Delhi		7
V	Ethnobotany Study of common plants used by tribes. <i>Aegle marmelos</i> , <i>Ficus religiosa</i> , <i>Cynodon dactylon</i> . Visit a tribal area and collect information on their traditional method of treatment using crude drugs. Familiarize with at least 5 folk medicines and study the cultivation, extraction and its medicinal application. Observe the plants of ethnobotanical importance in your area. Visit to an Ayurveda college or Ayurvedic Research Institute / Hospital		7

VI	Instrumentation and herbal Preparations Develop Capsules of herbs/ Develop Herbal oils/ Develop Poultice/cream Analyse some active ingredients using chromatography /Spectrophotometry	8												
VII	Pharmacognosy Organoleptic studies of plants mentioned in the theory : 1. Morphological studies of vegetative and floral parts. 2. Microscopic preparations of root, stem and leaf. 3. Stomatal number and stomatal index. 4. Vein islet number. 5. Palisade ratio. 6. Fibres and vessels (maceration). 7. Starch test 8. Proteins and lipid test	8												
VIII	Phytochemistry: Determination of the percentage of foreign leaf in a drug composed of a mixture of leaves. Dimensions of Calcium oxalate crystals in powdered crude drug. Preliminary phytochemical tests for alkaloids, terpenoids, glycosides, volatile oils, tannins & resins. Any 5 herbal preparations.	7												
<p>Suggested Readings: Course Books published in Hindi may be prescribed by the Universities.</p> <ol style="list-style-type: none"> 1. Plant Ecology And Economic Botany by Dhankar - Sharma - Trivedi, RBD Publication 2. Shiva Kant, Pankaj Kumar Brahmiya : Thakur Publication 3. PHARMACOGNOSY ...Hindi Edition (Paperback, Hindi, Dr. Akancha Rashi, KHUSHAL JASWANI), RM Publication 4. Pharmacognosy ...Hindi Edition (Paperback, Hindi, Dr. Akancha Rashi, KHUSHAL JASWANI), RM Publication <ol style="list-style-type: none"> 1. Wallis, T. E. 1946. Textbook of Pharmacognosy, J & A Churchill Ltd. 2. Roseline, A. 2011. Pharmacognosy. MJP Publishers, Chennai. 3. Jain S. K. 1989. Methods and approaches in Ethnobotany, Society of Ethnobotanists, Lucknow. 4. Pal, D.C. & Jain, S.K., 1998. Tribal Medicine. Naya Prakash Publishers, Calcutta. 5. Datta & Mukerji, 1952. Pharmacognosy of Indian roots of Rhizome drugs. Bulletin No.1 Ministry of Health, Govt. of India. 6. Young Ken, H.W., 1948. Text Book of Pharmacognosy. Blakiston C., Philadelphia. 7. Shukla, R.S., 2000. Forestry for tribal development. A.H. Wheeler & Co. Ltd., India. 8. Raychudhuri, S.P., 1991. (Ed.) Recent advances in Medicinal aromatic and spice crops. Vol.1, Today & Tomorrow's printers and publishers, New Delhi. 9. Khasim S.M Botanical Microtechniques: Principles and Practice- 10. Sambamurthy, AVSS & Subrahmanyam, NS (2000). Economic Botany of Crop Plants. Asiotech Publishers. New Delhi. 11. Singh, D.K and K.V. Peter. 2014. Protected cultivation of horticultural crops. New India Publishing Agency 														
<p>This course can be opted as an elective by the students of the following subjects: Open to all but special for B.Sc. Biotech, B.Sc. Forestry, B.Sc. Agriculture, B. Pharma, B.A. (Curators), B.A. Arch., BAMS</p>														
<p>Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Internal Assessment</th> <th style="text-align: center;">Marks</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Class Interaction</td> <td style="text-align: center;">5</td> </tr> <tr> <td style="text-align: center;">Quiz</td> <td style="text-align: center;">5</td> </tr> <tr> <td style="text-align: center;">Seminar</td> <td style="text-align: center;">7</td> </tr> <tr> <td style="text-align: center;">Assignment (Charts/ Flora/ Rural Service/ Technology Dissemination)</td> <td style="text-align: center;">8</td> </tr> <tr> <td></td> <td style="text-align: center;">25</td> </tr> </tbody> </table>			Internal Assessment	Marks	Class Interaction	5	Quiz	5	Seminar	7	Assignment (Charts/ Flora/ Rural Service/ Technology Dissemination)	8		25
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	<p>Course prerequisites: Qualification: To study this course, a student must have qualified 10+2 with Biology/ NSQF level 3 from Sector Skill Councils / Diploma holder from ITI in (Biology/ Agriculture/ Forestry). Facilities: Smart and Interactive Class Other Requisites: Video collection, Books, CDs, Flora, Herbarium, Access to On-line resources, Display Charts Lab requisites: Repository of economic products, Microscopes/ Botanical /Herbal Garden, TLC, Spectrophotometer.</p>
	<p>Suggested equivalent online courses: https://www.entrepreneurindia.co/Document/Download/pdfanddoc-144615-.pdf http://nopr.niscair.res.in/handle/123456789/45825 https://www.wipo.int/export/sites/www/tk/en/resources/pdf/medical_tk.pdf https://www.bentoli.com/commercial-farming-agriculture/</p>



**DETAIL SYLLABUS
OF
B.Sc.-III YEAR
or
BACHELOR OF SCIENCE
(BOTANY)**

BACHELOR OF SCIENCE (BOTANY)		
Programme/Class: <i>Bachelor of Science</i>	Year: III	Semester: V Paper-I
Subject: BOTANY		
Course Code: B040501T	Course Title: Plant Physiology, Metabolism & Biochemistry	
Course outcomes:		
After the completion of the course the students will be able to:		
1. Understand the role of Physiological and metabolic processes for plant growth and development.		
2. Learn the symptoms of Mineral Deficiency in crops and their management.		
3. Assimilate Knowledge about Biochemical constitution of plant diversity.		
4. Know the role of plants in development of natural products, nutraceuticals, dietary supplements, antioxidants		
Credits: 4	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week) 4-0-0		
Unit	Topic	No. of Lectures(60hrs)
I	Plant water relation, Mineral Nutrition, Transpiration and translocation in phloem Importance of water, water potential and its components; Transpiration and its significance; Factors affecting transpiration; Root pressure and guttation. Criteria of essentiality of elements; Role of essential elements; Symptoms of mineral deficiency in major crops, Transport of ions across cell membrane, active and passive transport, Composition of phloem sap, girdling experiment; Pressure flow model.	7
II	Carbon Oxidation Krebs cycle, Glycolysis, fate of pyruvate- aerobic and anaerobic respiration and fermentation, regulation of glycolysis, oxidative pentose phosphate pathway, oxidative decarboxylation of pyruvate, regulation of Krebs cycle, mitochondrial electron transport, oxidative phosphorylation, ATP-Synthetase, Chemiosmotic mechanism, P/O ratio, cyanide-resistant respiration, factors affecting respiration.	7
III	Nitrogen Metabolism Nitrate assimilation, biological nitrogen fixation (examples of legumes and non-legumes), Physiology and biochemistry of nitrogen fixation, Ammonia assimilation (GS-GOGAT), reductive amination and transamination, amino acid synthesis.	8
IV	Lipid Metabolism & Photosynthesis Lipid Metabolism: Synthesis and breakdown of triglycerides, -oxidation, glyoxylate cycle, gluconeogenesis and its role in mobilization of lipids during seed germination, -oxidation. ; Photosynthesis: Pigments, Action spectra and Enhancement effect, Electron transport system and Photophosphorylation, C3 & C4 photosynthesis, CAM- Reaction and Significance	7
V	Plant Development, Movements, Dormancy & Responses Developmental roles of Phytohormones (auxins, gibberellins, cytokinins, ABA, ethylene.) autonomic & paratonic movements, Control and Coordination in plants, Photoperiodism (SDP, LDP, Day neutral plants); Phytochrome (discovery and structure), red and far red-light responses on photomorphogenesis, Seed physiology & Dormancy, Vernalization & Senescence	8

This course can be opted as an elective by the students of following subjects: Open to all but special for following: B.Sc. Math, B.Sc. Statistics, B.Sc. Nutrition, B.Sc. Biophysics, B.Sc. Biotech,

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests

Internal Assessment	Marks
Class Interaction	5
Quiz	5
Seminar	7
Assignment (Charts/ Flora/ Rural Service/ Technology Dissemination)	8
	25

Course prerequisites:

Qualification: To study this course, a student must have qualified 10+2 with Biology/ NSQF level 3 from Sector Skill Councils / Diploma holder from ITI in (Biology/ Agriculture/ Forestry/ Biotech/ /Gardening)

Facilities: Smart and Interactive Class

Other Requisites: Video collection, Books, CDs, Access to On-line resources, Display Charts

Suggested equivalent online courses:

<https://www.classcentral.com/course/swayam-plant-physiology-and-metabolism-17732>

<https://www.wiziq.com/course/3249-plant-physiology-in-10-live-online-classes>

<https://www.easybiologyclass.com/plant-physiology-free-lecture-notes-online-tutorials-lecture-notes-ppts-mcqs/>

https://onlinecourses.swayam2.ac.in/cec19_bt09/preview

Programme/Class: Bachelor of Science		Year: III	Semester: V Paper-II
Subject: BOTANY			
Course Code: B040502T		Course Title: Molecular Biology & Bioinformatics	
Course outcomes:			
After the completion of the course the students will be able to:			
1. Understand nucleic acids, organization of DNA in prokaryotes and Eukaryotes, DNA replication mechanism, genetic code and transcription process.			
2. Know about Processing and modification of RNA and translation process, function and regulation of expression.			
3. Gain working knowledge of the practical and theoretical concepts of bioinformatics			
Credits: 4		CC / Elective	
Max. Marks: 25+75		Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week) 4-0-0			
Unit	Topic		No. of Lectures(60hrs)
I	Genetic material Miescher to Watson and Crick- historic perspective, Griffith's and Avery's transformation experiments, Hershey-Chase, bacteriophage experiment, DNA structure, types of DNA, types of genetic material. DNA replication (Prokaryotes and eukaryotes): semi-conservative. DNA replication (Prokaryotes and eukaryotes): bidirectional replication, semi-conservative, semi discontinuous RNA priming, θ (theta) mode of replication, replication of linear, dsDNA, replicating the 5' end of linear chromosome including replication enzymes.		7

II	Transcription & Regulation of gene expression Types of structures of RNA (mRNA, tRNA, rRNA), RNA polymerase- various types; Translation, (Prokaryotes and eukaryotes), genetic code. Regulation of gene expression in Prokaryotes: Lac operon and Tryptophan operon; and in Eukaryotes	7
III	Principles & Techniques of genetic engineering Blotting techniques: Northern, Southern and Western Blotting, DNA Fingerprinting; Molecular DNA markers i.e. RAPD, RFLP, SNPs; DNA sequencing, PCR and Reverse Transcriptase-PCR. Hybridoma and monoclonal antibodies, ELISA and Immunodetection. Antibody Engineering.	8
IV	Applications of Genetic engineering Pest resistant (Bt-cotton); herbicide resistant plants (RoundUp Ready soybean); Transgenic crops with improved quality traits (Flavr Savr tomato, Golden rice); Improved horticultural varieties (Moondust carnations); Role of transgenics in bioremediation (Superbug); Industrial enzymes (Aspergillase, Protease, Lipase); Genetically Engineered Products, Biosafety concerns..	7
V	Bioinformatics & its applications Computer fundamentals - programming languages in bioinformatics, role of supercomputers in biology. Historical background. Scope of bioinformatics - Genomics, Transcriptomics, Proteomics, Metabolomics, Molecular Phylogeny, computer aided Drug Design (structure based and ligand based approaches), Systems Biology and Functional Biology. Applications and Limitations of bioinformatics.	8
VI	Biological databases : Introduction to biological databases - primary, secondary and composite databases, NCBI, nucleic acid databases (GenBank, EMBL, DDBJ, NDB), protein databases (PIR, Swiss-Prot, TrEMBL, PDB), metabolic pathway database (KEGG, EcoCyc, and MetaCyc), small molecule databases (PubChem,)	8
VII	Data Generation and Data Retrieval Generation of data (Gene sequencing, Protein sequencing, Mass spectrometry, Microarray), Sequence submission tools (BankIt, Sequin, Webin); Sequence file format (flat file, FASTA, GCG, EMBL, Clustal, Phylip, Swiss-Prot); Sequence annotation; Data retrieval systems (SRS, Entrez)	7
VIII	Phylogenetic analysis Similarity, identity and homology, Alignment – local and global alignment, pairwise and multiple sequence alignments, alignment algorithms. Methods of Alignment (Dot matrix, Dynamic Programming, BLAST and FASTA); Phylogenetic analysis: Construction of phylogenetic tree, dendrograms, methods of construction of phylogenetic trees.	8

Suggested Readings:

Course Books published in Hindi may be prescribed by the Universities.

1. Dr Pooja Rai. [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED], Bhopal
2. Sharma - Trivedi Molecular Biology And Biotechnology ([REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]) by RBD Publisher
3. Plant Physiology and Biochemistry ISBN #: 81-301-0035-5 Author: Sunil D Purohit, K. Ahmed & Gotam K Kukda Edition: 2013 Pages: 368 + VIII Type: Text Book (Hindi)
4. Molecular Biology Biotechnology ISBN #: 81-301-0033-9 Author: Sunil D Purohit & Gotam K Kukda Edition: 2013 Pages: 366 + X Type: Text Book (Hindi) Apex Publishing House, Udaipur, Rajasthan
5. Bioinformatics Paperback – 1 January 2015 by Dr Archana Pandeya (Author), Santosh Choubey (Editor), & 2 More Hindi AISECT Ltd.
6. BIOTECHNOLOGY AND GENETIC ENGINEERING (Hindi, Hardcover, Dr. Archana Nigam)

1. Primrose, SB. 1995. Principles of Genome Analysis. Blackwell Science Ltd.Oxford, UK..
2. E.J. Gardner and D.P. Snustad. PRINCIPAL OF GENETICS (1984), John Wiley & Sons, Ney York.
3. Watson, J. D., Baker T.A., Bell, S. P., Gann, A., Levine, M., and Losick, R., 2008 Molecular Biology of the Gene 6th edition. Cold Spring Harbour Lab. Press, Pearson Pub.
4. Freifelder - Molecular Biology.
5. P.K. Gupta. BIOTECHNOLOGY AND GENOMICS. Rastogi Publications, 7th Reprint (1st Edition): 2016-2017.
6. Ghosh, Z., Mallick, B. (2008). Bioinformatics – Principles and Applications, 1st edition. New Delhi, Delhi: Oxford University Press.
7. Baxevanis, A.D. and Ouellette, B.F., John (2005). Bioinformatics: A Practical Guide to the Analysis of Genes and Proteins, 3rd edition. New Jersey, U.S.: Wiley & Sons, Inc.
8. Roy, D. (2009). Bioinformatics, 1st edition. New Delhi, Delhi: Narosa Publishing House.
9. Andreas, D., Baxevanis, B.F., Francis, Ouellette. (2004). Bioinformatics: A practical guide to the analysis of genes and proteins, 3rd edition. New Jersey, U.S.: John Wiley and Sons.
10. Pevsner J. (2009). Bioinformatics and Functional Genomics, 2nd edition. New Jersey,U.S.: Wiley Blackwell.
11. Xiong J. (2006). Essential Bioinformatics, 1st edition. Cambridge, U.K.: Cambridge University Press
12. A Textbook Of Basic And Molecular Genetics (pb)ISBN : 9788188826193Edition : 01Year : 2018Author : Dr. Parihar

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This course can be opted as an elective by the students of following subjects:

Open to all but special for following: B.Sc. Math, B.Sc. Statistics, B.Sc. Nutrition, B.Sc. Biophysics, B.Sc. Biotech, B.Sc. Forestry, B.Sc. Agriculture.

Suggested Continuous Evaluation Methods:Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Internal Assessment	Marks
Class Interaction	5
Quiz	5
Seminar	7
Assignment (Charts/ Flora/ Rural Service/ Technology Dissemination)	8
	25

Course prerequisites:

Qualification: To study this course, a student must have qualified 10+2 with Biology/ NSQF level 3 from Sector Skill Councils / Diploma holder from ITI in (Biology/ Agriculture/ Forestry/ Biotech)

Facilities: Smart and Interactive Class

Other Requisites: Video collection, Books, CDs, Access to On-line resources, Display Charts

Suggested equivalent online courses:

<https://www.edx.org/learn/molecular-biology>

<https://www.vlab.co.in/broad-area-biotechnology-and-biomedical-engineering>

<https://www.classcentral.com/course/swayam-genetic-engineering-theory-and-application-14090>

<https://www.coursera.org/courses?query=genetics>

<https://www.coursera.org/courses?query=molecular%20biology>

<https://www.edx.org/learn/genetic-engineering>

<https://www.mooc-list.com/tags/genetic-engineering>

<https://www.classcentral.com/course/edx-molecular-biology-part-1-dna-replication-and-repair-2907>

<https://nptel.ac.in/courses/102/103/102103013/>

Programme/Class: Bachelor of Science		Year: III	Semester: V Paper-III
Subject: Botany			
Course Code: B040503P		Course Title: Experiments in physiology, Biochemistry & molecular biology	
Course outcomes:			
After the completion of the course the students will be able to:			
<ol style="list-style-type: none"> 1. Know and authentic the physiological processes undergoing in plants along with their metabolism 2. Identify Mineral deficiencies based on visual symptoms 3. Understand and develop skill for conducting molecular experiments for genetic engineering 			
Credits: 2		Core Compulsory	
Max. Marks: 25+75		Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week) 0-0-2			
Unit	Topic*		No. of Lectures(60 hrs)
	<i>*(Perform any three from each unit based on facility)</i>		
I	Plant water relation, Mineral Nutrition and translocation in phloem 1. Determination of osmotic potential of plant cell sap by plasmolytic method using leaves of Rhoeo / Tradescantia. 2. Osmosis – by potato osmoscope experiment 3. Effect of temperature on absorption of water by storage tissue and determination of Q ₁₀ . 4. Experiment to demonstrate the transpiration phenomenon with the bell jar method 5. Experiment for demonstration of Transpiration by Four-Leaf Experiment: 6. Structure of stomata (dicot & monocot) 7. Determination of rate of transpiration using cobalt chloride method. 8. Experiment to measure the rate of transpiration by using Farmer's Potometer 9. Experiment to measure the rate of transpiration by using Ganong's potometer 10. Effect of Temperature on membrane permeability by colorimetric method. 11. Study of mineral deficiency symptoms using plant material/photographs.		8
II	Nitrogen Metabolism, Photo Synthesis & Respiration 1. A basic idea of chromatography: Principle, paper chromatography and column chromatography; demonstration of column chromatography. 2. Separation of plastidial pigments by solvent and paper chromatography. 3. Estimation of total chlorophyll content from different chronologically aged leaves (young, mature and senescence) by Arnon method. 4. Effect of HCO ₃ concentration on oxygen evolution during photosynthesis in an aquatic plant and to find out the optimum and toxic concentration (either by volume measurement or bubble counting). 5. Measurement of oxygen uptake by respiring tissue (per g/hr.) 6. Determination of the RQ of germinating seeds. 7. Effect of light intensity on oxygen evolution in photosynthesis using Wilmott' bubble		8
III	Plant Development, Movements, Dormancy & Responses 1. Geotropism and phototropism — Klinostät 2. Hydrotropism a. Measurement of growth — Arc and Liver Auxonometer 3. To study the phenomenon of seed germination (effect of light). 4. To study the induction of amylase activity in germinating grains.		8

	<ol style="list-style-type: none"> 5. Test of seed viability by TTC method. 6. To study the effect of different concentrations of IAA on <i>Avena</i> coleoptile elongation (IAA bioassay) 	
IV	<p>Techniques for biochemical analysis</p> <ol style="list-style-type: none"> 1. Weighing and Preparation of solutions -percentage, molar & normal solutions, dilution from stock solution etc. 2. Separation of amino acids by paper chromatography. 3. Detection of organic acids: citric, tartaric, oxalic and malic from laboratory samples., 4. Qualitative Analysis of carbohydrates, 5. Estimation of reducing sugar by anthrone method, 6. Qualitative Analysis of Lipids 7. Qualitative analysis of Amino acids and Proteins 8. Quantitative Analysis of Nucleic Acids, 9. Analysis of dietary supplements, nutraceuticals & antioxidants 10. Testing of adulterants in food items. 	8
V	<p>Genetic material</p> <ol style="list-style-type: none"> 1. Instruments and equipments used in molecular biology. 2. Preparation of LB medium and cultivating E.coli on it. 3. Isolation of Genomic DNA 4. Isolation of DNA from plants 5. Examination of the purity of DNA by agarose gel electrophoresis. 6. Quantification of DNA by UV-spectrophotometer 7. Estimation of DNA by diphenylamine method. 	7
VI	<p>Preparation of models/ charts:</p> <ol style="list-style-type: none"> 1. Study of experiments establishing nucleic acid as genetic material (Avery et al, Griffith's, Hershey & Chase's and Fraenkel & Conrat's experiments)through photographs 2. Numericals based on DNA re-association kinetics (melting profiles and Cot curves) 3. Study of DNA replication through photographs: Modes of replication - Rolling circle, Theta and semi-discontinuous ; Semiconservative model of replication (Messelson and Stahl's experiment); Telomerase assisted end-replication of linear DNA 4. Study of structures of : tRNA (2D and 3D); prokaryotic RNA polymerase and eukaryotic RNA polymerase II through photographs 5. Study of the following through photographs: Assembly of Spliceosome machinery; Splicing mechanism in group I & group II introns; Ribozymes and Alternative splicing 6. Understanding the regulation of lactose (lac) operon (positive & negative regulation) and tryptophan (trp) operon (Repression and De-repression & Attenuation) through photographs. 7. Understanding the mechanism of RNAi by photographs 	7
VII	<p>Genetic Engineering</p> <ol style="list-style-type: none"> 1. Isolation of protoplasts. 2. Construction of restriction map of circular and linear DNA from the data provided. 3. Isolation of plasmid DNA. 4. Restriction digestion and gel electrophoresis of plasmid DNA (demonstration/ photograph). 5. Calculate the percentage similarity between different cultivars of a species using RAPD profile. Construct a dendrogram and interpret results. 	7

	6. Agarose gel analysis of plasmid DNA 7. Restriction digestion of plasmid DNA -Demonstration of PCR	
VIII	Applications of Genetic engineering 1. ELISA Test, 2. Viability tests of cells 3. Study of methods of gene transfer through photographs: Agrobacterium-mediated, direct gene transfer by electroporation, microinjection, microprojectile bombardment. 4. Study of steps of genetic engineering for production of Bt cotton, Golden rice, FlavrSavr tomato through photographs.	7

Suggested Readings:

Course Books published in Hindi may be prescribed by the Universities.

1. [Hindi text] 3 [Hindi text]
1. Karp, G. 2010. Cell and Molecular Biology: Concepts and Experiments. 6th Edition. John Wiley & Sons. Inc.
2. A Laboratory Manual Of Plant, Physiology, Biochemistry And Ecology ISBN : 9788177544589 Edition : 01 Year : 2012 Author : Akhtar Inam Publisher : Agrobios (India)
3. Advanced Methods In Physiology And Biochemistry (pb) ISBN : 9789381191132 Edition : 01 Year : 2016 Author : Padmanaban G , Chandrasekaran CN , Thangavelu AU , Dr. Sivakumar R , Kalimuthu N , Dr. Boominathan P , Dr. Anbarasan P, Agrobios.
4. Methods in Plant Biochemistry and Molecular Biology. 1997. Dashek, WV (ed.). CRC Press.
5. Wilson and Walker .Practical Biochemistry: Principles and Techniques. Cambridge University Press.U.K.
6. Thimmaiah, SR. 2004. Standard Methods of Biochemical Analysis. Kalyani Publishers.
7. Henry, RJ. 1997. Practical Application of Plant Molecular Biology. Chapman & Hall, London

This course can be opted as an elective by the students of following subjects:

Open to all but special for following: B.Sc. Math, B.Sc. Statistics, B.Sc. Nutrition, B.Sc. Biophysics, B.Sc. Biotech, B.Sc. Forestry, B.Sc. Agriculture.

Suggested Continuous Evaluation Methods:

Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Internal Assessment	Marks
Class Interaction	5
Quiz	5
Seminar	7
Assignment (Charts/ Flora/ Rural Service/ Technology Dissemination)	8
	25

Course prerequisites:

Qualification: To study this course, a student must have qualified 10+2 with Biology/ NSQF level 3 from Sector Skill Councils / Diploma holder from ITI in (Biology/ Agriculture/ Forestry/ Biotech/ /Gardening)

Facilities: Smart and Interactive Class

Other Requisites: Video collection, Books, CDs, Access to On-line resources, Display Charts

Lab requisites: Electrophoresis units, Gelrocker, UV-transilluminator, Vortex Mixer, Shaker, CVT,

HiMedia Biotechnology &Molecular biology Kits/Chemicals, Micropipettes, Elisa reader/Microtitre Reader

Suggested equivalent online courses:

<https://www.edx.org/learn/molecular-biology>

<https://krishikosh.egranth.ac.in/handle/1/5810039999>

<https://www.classcentral.com/course/swayam-genetic-engineering-theory-and-application-14090>

<https://www.coursera.org/courses?query=genetics>

<https://www.coursera.org/courses?query=molecular%20biology>

<https://www.edx.org/learn/genetic-engineering>

<https://www.mooc-list.com/tags/genetic-engineering>

<https://www.classcentral.com/course/edx-molecular-biology-part-1-dna-replication-and-repair-2907>

Programme/Class: Bachelor of Science	Year: III	Semester: V Paper-IV
Subject: BOTANY		
Course Code: - B040504R	Course Title: Project in Botany for Pre-graduation	
Course outcomes:		
<ul style="list-style-type: none"> ● Project work will supplement field experimental learning and deviations from classroom and laboratory transactions. ● project work will enhance the capability to apply gained knowledge and understanding for selecting, solving and decision-making processes. ● It will promote creativity and the spirit of enquiry in learners. ● They will learn to consult Scientists, libraries, laboratories and herbariums and learn importance of discussions, Botanical & field trips, print and electronic media, internet etc. along with data documentation, compilation, analysis & representation in form of dissertation writing. ● It will enhance their abilities, enthusiasm, and interest. 		
Credits: 03	Core: Compulsory	
Max. Marks: 25+75	Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week): 0-0-3.		
Suggestive List Of PROJECTS		
<ol style="list-style-type: none"> 1. Rural Areas: Flora of a city/ village, Biodiversity of Village, Soil & seed testing service provision to farmers, 2. Industrial waste management 3. water pollution status of rural water & promotion of WASH in villages 4. Plant Disease identification in farms, nurseries and orchards. 5. Digital portal for plants: Campus, city or particular area 6. Rare and endangered plants & their conservation & domestication 7. Air pollution tolerance index (APTI) : Screening of sensitive/tolerant plant species at various locations in particular area 8. Science Communication by Creating science documentaries of innovators , Internet Science (Social media, Websites, Blogs, Youtube, Podcast etc.) 9. Science Outreach Talks and Public Sensitization for plant biodiversity conservation sensitization of public. 10. Phytochemistry of medicinal plants & their antimicrobial, nutraceutical and antioxidant properties 11. Study of pollen grains in different flowers 12. Study of stomata in different plants 13. Study of various types of secretory and special tissues in plants. 		
Refer: libraries, journals, Memoirs, encyclopaedias, herbaria, Museums, etc.		
This course can be opted as an elective by the students of following subjects:		Open to all
Suggested Continuous Evaluation Methods:		
Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:		
Internal Assessment		Marks
Class Interaction		5
Seminar		10
Thesis/dissertation		10
		25
Course prerequisites:		

Qualification: To study this course, a student must have qualified 10+2 with Biology/ NSQF level 3 from Sector Skill Councils / Diploma holder from ITI in (Biology/ Agriculture/ Biotech/ Forestry/ Microbiology/Gardening /biomedical Science.

Facilities: Smart and Interactive Class

Other Requisites: All listed under all papers of the course.

Suggested equivalent online courses:

<https://ndl.iitkgp.ac.in/>

https://asiafoundation.org/what-we-do/books-for-asia?gclid=CjwKCAiA7939BRBMEiwA-hX5J-QhBITSyPnvj3r8yeio-L9f5uTy1a6oEoALCLa9Ebu0pyz858yQZxoC5wkQAvD_BwE

<http://www.dli.ernet.in/>

<http://www.ulib.org/>

<http://www.tkd1.res.in/>

<http://www.vigyanprasar.gov.in/digilib>

Directory of Open Access Repositories (DOAR)<http://www.opendoar.org>

Registry of Open Access Repositories (ROAR)<http://roar.eprints.org/>

http://www.iscnagpur.ac.in/knowledge_learning_files/5.7_General_Open_Access_e-Resources.pdf

Programme/Class: <i>Bachelor of Science</i>		Year: III	Semester: VI Paper-I
Subject: Botany			
Course Code: B040601T		Course Title: Cytogenetics, Plant Breeding & Nanotechnology	
Course outcomes: After the completion of the course the students will be able:			
<ol style="list-style-type: none"> 1. Acquire knowledge on cell ultrastructure. 2. Understand the structure and chemical composition of chromatin and concept of cell division. 3. Interpret the Mendel's principles, acquire knowledge on cytoplasmic inheritance and sex-linked inheritance. 4. Understand the concept of 'one gene one enzyme hypothesis' along with the molecular mechanism of mutation. 			
Credits: 4		Core Compulsory	
Max. Marks: 25+75		Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week): 4-0-0			
Unit	Topic	No. of Lectures (60hrs)	
I	Cell biology Structure and function of cell wall, plasma membrane, ribosomes, Endoplasmic reticulum, golgi apparatus, mitochondria, chloroplast, lysosomes, peroxisomes and cell inclusions - Organization of nucleus: nuclear envelope, nucleoplasm and nucleolus. Chromosomal nomenclature- chromatids, centromere, telomere, satellite, secondary constriction. Organization of chromosomes- Nucleic acid and histones- types and classification. Lampbrush chromosomes and polytene chromosomes- Karyotype and idiogram. Cell cycle: G ₀ , G ₁ , S and G ₂ phases – mitosis: open and closed mitosis – amitosis - meiosis. Variation in Chromosome number (Numerical aberrations)- aneuploidy and Euploidy-haploidy, polyploidy- significance (Structural aberrations) - deletion, duplication, inversion and translocation.	8	
II	Genetics Chromosome theory of inheritance, crossing over and linkage; Incomplete dominance and codominance; Interaction of Genes; Multiple alleles, Lethal alleles, Epistasis, Pleiotropy, Polygenic inheritance; Extra-nuclear Inheritance, Linkage, crossing over, Concept of sex determination and Sex chromosomes; Patterns of Sex determination in plants	7	
III	Plant breeding Plant introduction. Agencies of plant introduction in India, Procedure of introduction - Acclimatization – Achievements, Selection - mass selection, pure line selection and clonal selection. Genetic basis of selection methods, Hybridization: Procedure of hybridization, inter generic, inter specific, inter varietal hybridization with examples. Composite and synthetic varieties, Male sterility, Heterosis and its exploitation in plant breeding, Mutation, Molecular Breeding (use of DNA markers in plant breeding), achievements in India, Breeding for pest, pathogenic diseases and stress resistance.	8	
IV	Biostatistics: Definition, statistical methods, basic principles, variables- measurements, functions, limitations and uses of statistics. Biometry: Data, Sample, Population, random sampling, Frequency distribution- definition only, Central tendency– Arithmetic Mean, Mode and Median; Measurement of dispersion–Coefficient of variation, Standard Deviation, Standard error of Mean; Test of significance: chi- square test for goodness of fit. Computer application in biostatistics - MS Excel and SPSS	7	
V	Plant tissue culture	8	

	Principles, components and techniques of <i>in vitro</i> plant cultures, Callus cultures, Cell culture, cell suspension cultures, Embryogenesis and organogenesis, Protoplast isolation and culturing of protoplast- principle and application, regeneration of protoplasts, protoplast fusion and somatic hybridization- selection of hybrid cells, Somaclonal variation, Plant secondary metabolites production.	
VI	Nanotechnology Fundamentals of nanoscale self-assembly process involved in important functional biomolecules such as Nucleic acid (DNA and RNA), Proteins, Enzymes. Cell structure and organelles, nanoscale assembly of cellular components (cell membrane and liposomes). Nanoscale assembly of microorganisms (virus). Nano-particles synthesis, Biological synthesis of Nanoparticles, Advantages and applications of biologically synthesized nanomaterials. Introduction to biological nanomaterials. Biomineralization, Magnetosomes, nano-pesticides, nano-fertilizers, nano-sensors.	7
VII	Artificial Intelligence in Plant Sciences Big Data Analytics, Blockchain Technology, 3-D Printing, Machine learning, Algorithms of Machine Learning, Expert systems and Fuzzy logic , Artificial Neural Networks and Genetic algorithms, Predictive Analytics, Agents and Robotics, IoT Sensors, Object Image capture & analysis ; Applications of Artificial Neural Networks in Plant Science.	8
VIII	Introduction to use of Digital technologies – AI, IoT & ICT in Botany Educational software- INFLIBNET, NICNET, BRNET, internet as a knowledge repository- google scholar, science direct. resource management, weather forecasting. IoT Database management, IoT platforms, IoT Graphical user interface • IoT application development for Android Mobile phones, ICT Applications for different crops and horticulture	7

Suggested Readings:

Course Books published in Hindi may be prescribed by the Universities.

1. 000000 0000000 0000000000 ,00000 000 000000000000 0000
:0000 000000 0000000 :0000000 0000000 0000
 2. 000000 000000 , 0000000000 , 000 0000000000 Sharma and Trivedi byRBD Publisher
 3. **Cell Biology And Genetics (Hindi) 2/e PB ...Gupta P K (Hindi) rastogi Publications**
 4. **PLANT BIOTECHNOLOGY (HINDI) October 2019 Publisher: Kindle Direct Publishing ISBN: ISBN: 9781698665283 Authors:H. R. Dagla Jai Narain Vyas University**
 5. **Biotechnology: Fundamentals And Application (hindi) (hb) ISBN : 9788177544732Edition : 03Year : 2018Author : Dr. Purohit SS , Mathur S**
 6. **Biotechnology (Hindi) (Hindi, Paperback, B.D.Singh) Hindi Publisher: Kalyani Pubishers ISBN: 9789327246070, 9327246071**
 7. **Cytogenetics, Plant Breeding, Evolution and Biostatistics ISBN #: 978-81-301-0066-1Sunil D Purohit & Gotam K Kukda, Apex Publishing House**
 8. **Genetics and Biotechnology Sunil D Purohit, K. Ahmed & Gotam K Kukda Apex Publishing House**
 9. **Padap Prajanan (Hindi) Hardcover – 1 January 2016 by Chandra Prakash Shukl (Author) Pointer Publishers, Jaipur**
 10. **PLANT BREEDING : PRINCIPLE AND METHODS B D SINGH - IN HINDI**
 11. 000000 000 0000000000 0000-000000 Commission for Scientific and Technical Terminology (CSTT)
 12. 0000 0000000000 00000000 000 Commission for Scientific and Technical Terminology (CSTT)
1. G.M. Cooper. (2015). The cell: A Molecular Approach. 7th Edition. Sinauer Associates.
 2. Alberts, B., Johnson, A.D., Lewis, J., Morgan, D., Raff, M., Roberts, K., Walter, P. (2014). Molecular Biology of Cell. 6th Edition. WW. Norton & Co.
 3. Campbell, M.K. (2012) Biochemistry, 7th ed., Published by Cengage Learning.
 4. Campbell, P.N. and Smith, A.D. (2011). Biochemistry Illustrated, 4th ed., Published by Churchill Livingstone
 5. Tymoczko, J.L., Berg, J.M. and Stryer, L. (2012). Biochemistry: A short course, 2nd ed., W.H.Freeman.
 6. Berg, J.M., Tymoczko, J.L. and Stryer, L. (2011) Biochemistry, W.H.Freeman and Company

7. Nelson, D.L. and Cox, M.M. (2008). *Lehninger Principles of Biochemistry*, 5th Ed., W.H. Freeman and Company.
8. Karp, G. (2010). *Cell Biology*, John Wiley & Sons, U.S.A. 6th edition.
9. Hardin, J., Becker, G., Skliensmith, L.J. (2012). *Becker's World of the Cell*. 8th edition. Pearson Education Inc. U.S.A.)
10. Gardner, E.J., Simmons, M.J., Snustad, D.P. (1991). *Principles of Genetics*, John Wiley & sons, India. 8th e
11. Snustad, D.P. and Simmons, M.J. (2010). *Principles of Genetics*, John Wiley & Sons Inc., India. 5th edition.
12. Klug, W.S., Cummings, M.R., Spencer, C.A. (2009). *Concepts of Genetics*. Benjamin Cummings, U.S.A..
13. Griffiths, A.J.F., Wessler, S.R., Carroll, S.B., Doebley, J. (2010). *Introduction to Genetic Analysis*. W. H. Freeman and Co., U.S.A. 10th edition.
14. M K Raxdan *An Introduction to Plant Tissue Culture –*; Oxford & IBH Publishing Co.Pvt. Ltd., New Delhi
15. Aggarwal SK (2009) *Foundation Course in Biology*, 2nd Edition, Ane Books Pvt. Ltd
16. Allard RW (1960) *Principles of Plant Breeding*. John Willey and Sons. Inc. New York
17. BD Singh (2003) *Plant Breeding*. Kalyani Publishers
18. Cohn, N.S. (1964) *Elements of Cytology*. Brace and World Inc, New Delhi
19. Darnel, J. Lodish, Hand Baltimore, D. (1991) *Cell and molecular biology*. Lea and Fibiger, Washington.
20. De Robertis, E.D.P and Robertis, E.M.P (1991) *Cell and molecular biology* Scientific American books.
21. Dobzhansky, B (1961) *Genetic and origin of species*, Columbia university Press New York
22. Durbin (2007) *Biological Sequence Analysis*. Cambridge University Press India Pvt. Ltd
23. Gerald Karp (1985) *Cell biology*, Mc Graw Hill company..
24. Lewin, B, (1994) *Genes*, Oxford University Press, New York.
25. Lewis, W.H (1980) *Polyploidy*. Plenum Press, New York.
26. Nicholl T (2007) *An Introduction to Genetic Engineering*, Cambridge University Press India Pvt. Ltd
27. Roy S.C. and Kalayan kumar De (1997) *Cell biology*. New central Boos Calcutta
28. Sandhya Mitra, (1998) *Elements of molecular biology*. Macmillan, India Ltd.
29. Sharma JR (1994) *Principles and Practices of Plant Breeding*. Tata McGraw-Hill Pub. Co. New Delhi
30. Sharma, A.K and Sharma A (1980) *Chromosome technique Theory and practice*, Aditya Books, New York
31. Swanson, C.P (1957) *Cytology and Genetics*. Englewood cliffs, New York.
32. Taylor (2008) *Biological Sciences*. Cambridge University Press India Pvt. Ltd
33. Twyman, R.M. (1998) *Advanced molecular biology* Viva books New Delhi.
34. Veer Bala Rastogi (2008), *Fundamentals of Molecular Biology* Ane Books Pvt. Ltd
35. A. J. Nair . *Basics of Biotechnology- Laxmi Publications, New Delhi*.
36. S S Purohit and S K Mathur; *Biotechnology-Fundamentals and Application- Agrobotanica, India*.
37. A. J. Nair *Introduction to Genetic Engineering & Biotechnology*. Jones & Bartlett Publishers, Boston, USA.
38. H S Chawla *Introduction to Plant Biotechnology-;* Oxford & IBH publishing Co.Pvt.Ltd., New Delhi.
39. H D Kumar *Modern concept of Biotechnology*, Vikas Publishing House, Pvt. Ltd., New Delhi.
40. P C Trivedi , *Plant biotechnology, Recent Advances* Panima Publishing Corporation, New Delhi.
41. Du, C., and S. A. Jackson. 2019. Machine learning and complex biological data. *Genome Biology* 20: 76. <https://doi.org/10.1186/s13059-019-1689-0>
42. Alexis and Mathew Leon., *Fundamentals of Information Technology* Leon Vikas
43. Plant R. E., Stone N. D. (1991). *Knowledge-based systems in agriculture*. McGraw-Hill, Inc. 1221 Avenue of the Americas, New York, NY 10020.
44. Han S., Steward B.L., Tang L. (2016). Intelligent agricultural machinery and field robots. In Zhang Q. *Precision agriculture technology for crop farming* (pp.133-176). CRC Press, Taylor&Francis Group, New York.
45. Lucci S., Kopec D. (2013). *Artificial intelligence in the 21st century*. 22841 Quicksilver Drive Dulles, VA 20166.
46. V.Rajaraman *Introduction to Information Technology*, Prentice Hill.
47. Ramesh Bangia *Learning Computer Fundamentals*, Khanna Book Publishers
48. Bass, Joel, E and et. al., Allyn & Bacon, 2009 .*Methods for Teaching Science as Inquiry, The truth of science*, Newton R.G.,
49. R. Rangaswami (2009) *A Text book of Agriculture Statistics* .New Age International (P) Limited, Hyderabad.
50. Nageshwar Rao G. (2007) *Statistics for Agriculture Sciences* BS Publications. New Delhi
51. Nigam A.K. and Gupta, V.K. (1979) *Hand book on Analysis of Agricultural Experiments*. IASRI Publication, New Delhi.

52. Panse V.G. Sukhatme P.V. (1985) Statistical methods for Agricultural workers . Indian Council of Agricultural Research, New Delhi
53. Snedecor GW. & Cochran WG. (1989) Statistical Methods . Iowa State University Press.
54. Design and Analysis of Experiments by Das M.N. and Giri N.C.(1986). Wiley Eastern Ltd., New Delhi.
55. Gomez, A.A. and Gomez, A.A.(1984) Statistical Procedures for Agricultural Research .John Wiley and Sons. New York.
56. Gupta, S.C. (2016) Fundamentals of Statistics .Himalaya Publishing House Mumbai - 400004, Maharashtra, India.
- 57.V.K. Kapoor (2007) Fundamentals of Applied statistics by Sultan Chand and Sons, New Delhi- 110 002
58. Yubing Xie. 2012. Nanotechnology. CRC Press.The Nanobiotechnology Handbook. CRC Press.
59. Sulabha K. Kulkarni. 2014 Nanotechnology : Principles and Practices. CP publishing, New Delhi.
60. B S Murty, P Shankar, Baldev Raj, B B Rath, James Murday. 2012. Textbook of Nanoscience and Nanotechnology. Springer
61. K. K. Chattopadhyay and A. N. Banarjee. 2009. Introduction to Nanoscience and Nanotechnology. PHI Publication.
62. Sharma A.K. 2005. Text Book Of Biostatistics I, Discovery Publishing House.
63. Annadurai, B. 2007. Text Book of Biostatistics. New Age International.
64. Gurumani, N. 2010. An Introduction to Biostatistics (2nd Edn). MJP Publishers.
65. David S. Goodshell. 2004. Bionanotechnology-Lessons from nature. John Wiley Publications.
66. R. Stephen Crespi, Tibtech, Patenting in Biotechnology - Part I, Vol. 9, 117-122, 1991.
67. Pattnaik, P.K., Kumar, R., Pal, S., Panda, S.N. (Eds.)IoT and Analytics for Agriculture,2020
68. <https://www.springer.com/gp/book/9789811391767>
69. <https://www.springer.com/gp/book/9789811550720>
70. Petersen Roger G. (1994) Agricultural Field Experiments Design and Analysis by Marcel Dekker, NewYork.

This course can be opted as an elective by the students of following subjects:

Open to all but special for B.Sc. Biotech, B.Sc. Forestry, B.Sc. Agriculture, B. Pharma, B.Sc. Food Science, B.A. (Curators), B.A. Geology.

Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Internal Assessment	Marks
Class Interaction	5
Quiz	5
Seminar	7
Assignment (Charts/ Flora/ Rural Service/ Technology Dissemination)	8
	25

Course pre-requisites:

Qualification: To study this course, a student must have qualified 10+2 with Biology/ NSQF level 3 from Sector Skill Councils / Diploma holder from ITI in (Biology/ Agriculture/ Forestry/ Biotech/ Math/Statistics/Chemistry/ Computer Science)

Facilities: Smart and Interactive Class

Other Requisites: Video collection, Books, CDs, Access to On-line resources, Display Charts

Suggested equivalent online courses:

<https://www.cytology-iac.org/educational-resources/virtual-slide-library>

https://www.asct.com/ASCTWeb/Content/Cytopreparation_Online_Course.aspx

<https://www.mooc-list.com/tags/genetics>

<https://www.coursera.org/learn/genetics-evolution>

<https://www.my-mooc.com/en/mooc/introduction-to-genetics-and-evolution/>

Further Suggestions:

Access to Statistics, Chemistry, Math and Biotechnology resources will be required

Programme/Class: <i>Bachelor of Science</i>	Year: III	Semester: VI Paper-II
Subject: Botany		
Course Code: B040602T	Course Title: Ecology & Environment	
Course outcomes:		
<ol style="list-style-type: none"> acquaint the students with complex interrelationship between organisms and environment; make them understand methods for studying vegetation, community patterns and processes, ecosystem functions, and principles of phytogeography. This knowledge is critical in evolving strategies for sustainable natural resource management and biodiversity conservation. 		
Credits: 4		Core Compulsory/Elective
Max. Marks: 25+75		Min. Passing Marks:
Total No. of Lectures-Tutorials-Practical (in hours per week): 4-0-0		
Unit	Topic	No. of Lectures (60 hrs)
I	Natural resources & Sustainable utilization: Land Utilization, Soil degradation and management strategies; Restoration of degraded lands. Water , Wetlands; Threats and management strategies, Ramsar sites ,Forests: Major and minor forest products; Depletion, Biological Invasion, Energy: Renewable and non-renewable sources of energy , Contemporary practices in resource management : EIA, GIS, Participatory Resource Appraisal, Ecological Footprint with emphasis on carbon footprint, Resource Accounting.	7
II	Ecology & Ecosystem Definition of Ecology, Ecological Factors, Positive and negative interactions. Ecosystem – Concept of an ecosystem-structure and function of an ecosystem. Abiotic and biotic com-Energy flow in an ecosystem Ecological Succession-Definition & types. Processes and types (autogenic, allogenic, autotrophic, heterotrophic, primary & secondary), Hydrosere and Xerosere. Food chains and food webs, Ecological pyramids, production and productivity; And components. Types of ecosystems: Forest Ecosystem, Grassland, Crop land, aquatic Ecosystems Ecological Adaptations – Hydrophytes, Xerophytes, Halophytes, Epiphytes and Parasites.	8
III	Soil Formation, Properties & Conservation Soil: Origin, Formation, composition, Soil types, Soil Profile, Soil Microorganisms, soil processes, Soil Erosion, Biogeochemical cycles, Soil Conservation: Biological– Contour farming, Mulching, Strip cropping, Terracing and Crop rotation. Mechanical–Basin Listing, Construction of dams, Watershed Management, Soil reclamation	7
IV	Biodiversity and its conservation: Definition -genetic, species, and ecosystem diversity. Value of biodiversity: social, ethical, aesthetic and option values; hotspots of Biodiversity threats to biodiversity, Biotic communities and populations, their characteristics and dynamics. Endemic and endangered species of plants in India. Ecological niche, ecotypes, ecological indicators. <i>Conservation of Biodiversity:</i> Ex-situ and in-situ conservation, Red data book, botanical gardens, National park, Sanctuaries, hot & hottest spots and Bioreserves. Role of Seed Bank and Gene Bank Valuing plant resources, ecotourism, Role of NBPGR, FAO, BSI.	7

6. Odum, F.P. Fundamentals of Ecology, Latest Ed., Saunders
7. Sharma, P.D. Elements of Ecology, Latest Ed., Rastogi Publications
8. Ambasht, R.S. & Ambasht, N.K. A Text Book of Plant Ecology, Latest Ed., CBS Publication & Distributors
9. Mani, M.S. Bio-Geography of India, Latest Ed., Springer-Verlag.
10. Mackenzie et al. Ecology, Latest Ed., Viva Books.
11. Gurevitch, J. (et al.), The Ecology of plants, 2002, Sinauer Associates.
12. Kimar, U. & Asija, M.J. Bio-diversity: Principles & Conservation, 2005, Student Edition, Agrobios (India)
13. Krishnamurthy, K.V. An Advanced Text Book on Biodiversity, 2003, Oxford & IBH Publishing Co. Ltd.
14. Mitra, D., Guha, J.K., Chowdhury, S.K. Studies in Botany, Vol. II (7th ed.) Moulik Library.
15. Primack, R.B. Essentials of Conservation Biology, 1993, Sinauer Associates.
16. Lo, C.P. & Yeung, A.K.W. Concepts and Techniques of Geographic Information Systems, 2002, Printice-Hall of India.
17. Cain, Bowman, Hacker. Ecology. 2014. 3rd Ed. Sinauer Associates
18. Vasudevan, N. (2006). Essentials of Environmental Science. Narosa Publishing House, New Delhi.
19. Singh, J. S., Singh, S.P. and Gupta, S. (2006). Ecology, Environment and Resource Conservation. Anamaya Publications, New Delhi.
20. Rogers, P.P., Jalal, K.F. and Boyd, J.A. (2008). An Introduction to Sustainable Development. Prentice Hall of India Private Limited, New Delhi.
21. Abbasi, S. A. (1998). Environmental Pollution and its Control. Cogent International, Pondicherry.
22. Abbasi, S. A. and Ramasamy, E. V. (1999). Biotechnological Methods of Pollution Control. Universities Press (India) Limited, Hyderabad.
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24. Rand, M. C., Greenberg, A. E. and Taras, M. J. (Ed.) (1995). Standard methods for the examination of water and wastewater: 19th edition, American Public Health association (APHA), Washington, D.C.
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26. Tchobanoglaus, G. (1988). Wastewater Engineering: Treatment, Disposal, Reuse. Tata Mc Graw Hill, New Delhi.
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29. George, T. and Frank, K. (2002). Handbook of solid waste management: (Second edition). Mc Graw Hills.
30. Kanthi, L. S. (2000). Basics of Solids and hazardous waste management Technologies. Prentice Hall.
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33. with Policy and Science Considerations. Martinus Nijhoff Publishers.
34. Hardy, J.T. 2003. Climate Change: Causes, Effects and Solutions. John Wiley & Sons.
35. Harvey, D. 2000. Climate and Global Climate Change. Prentice Hall.
36. Manahan, S.E. 2010. Environmental Chemistry. CRC Press, Taylor and Francis Group.
37. Maslin, M. 2014. Climate Change: A Very Short Introduction. Oxford Publications.
38. Mathez, E.A. 2009. Climate Change: The Science of Global Warming and our Energy Future. Columbia University Press.
39. Mitra, A.P., Sharma, S., Bhattacharya, S., Garg, A., Devotta, S. & Sen, K. 2004. Climate Change and India. Universities Press, India.
40. Philander, S.G. 2012. Encyclopedia of Global Warming and Climate Change (2nd edition). Sage Publications.
41. Demers, M.N. 2005. Fundamentals of Geographic Information System. Wiley & Sons.
42. Richards, J. A. & Jia, X. 1999. Remote Sensing and Digital Image Processing. Springer.
43. Sabins, F. F. 1996. Remote Sensing: Principles an Interpretation. W. H. Freeman.
44. Gaston, K J. & Spicer, J.I. 1998. Biodiversity: An Introduction. Blackwell Science, London,
45. Singh, J. S. & Singh, S. P. 1987. Forest vegetation of the Himalaya. The Botanical Review 53:80-192.
46. Sodhi, N.S. & Ehrlich, P.R. (Eds). 2010. Conservation Biology for All. Oxford University Press.
47. Sodhi, N.S., Gibson, L. & Raven, P.H. 2013. Conservation Biology: Voices from the Tropics. Wiley-Blackwell, Oxford, UK.

This course can be opted as an elective by the students of following subjects: Open to all but special for B.Sc. Biotech, B.Sc. Microbiology, B.Sc. Agriculture, B.A. (Curators), B.A. Archaeology, B.A. Geology

Suggested Continuous Evaluation Methods:

Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:

Internal Assessment	Marks
Class Interaction	5
Quiz	5
Seminar	7
Assignment (Charts/ Flora/ Rural Service/ Technology Dissemination)	8
	25

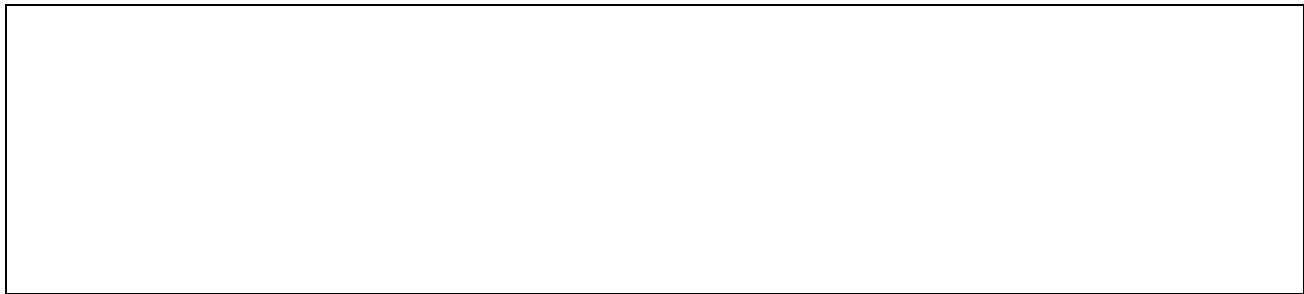
Course prerequisites:
Qualification: To study this course, a student must have qualified 10+2 with Biology/ NSQF level 3 from Sector Skill Councils / Diploma holder from ITI in (Biology/ Agriculture/ Biotech/ Forestry/ Microbiology/Gardening /biomedical Science).
Facilities: Smart and Interactive Class
Other Requisites: Video collection, Books, CDs, Access to On-line resources, Display Charts

Suggested equivalent online courses:
<https://community.plantae.org/tags/mooc>
futurelearn.com/courses/teaching-biology-inspiring-students-with-plants-in-science
<https://www.coursera.org/courses?query=plants>
<http://egyankosh.ac.in/handle/123456789/53530>

Programme/Class: <i>Bachelor of Science</i>	Year: III	Semester: VI Paper-III
Subject: Botany		
Course Code: B040603P	Course Title: Lab on Cytogenetics, Conservation & Environment management	
Course outcomes: After the completion of the course the students will be able:		
<ol style="list-style-type: none"> To perform all experiments related to the semester-i.e. Plant tissue cultured plants, conducting breeding on field, conserving and depolluting the environment. Can be employed in environment impact assessment companies & start his own venture 		
Credits: 2		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks:
Total No. of Lectures-Tutorials-Practical (in hours per week): 0-0-2		
Unit	Topic	No. of Lectures(60hrs)
I	Cell biology <ol style="list-style-type: none"> Study of plant cell structure with the help of epidermal peel mount of Onion/Rhoeo/Crinum Measurement of cell size by the technique of micrometry. Counting cells per unit volume with the help of haemocytometer (Yeast/pollen grains) Determination of mitotic index and frequency of different mitotic stages in pre-fixed root tips of <i>Allium cepa</i>. 	7

II	Genetics <ol style="list-style-type: none"> 1. Monohybrid cross (Dominance and incomplete dominance) 2. Dihybrid cross (Dominance and incomplete dominance) 3. Gene interactions (All types of gene interactions mentioned in the syllabus) <ol style="list-style-type: none"> a. Recessive epistasis 9: 3: 1. b. Dominant epistasis 12: 3: 1 c. Complementary genes 9: 7 d. Duplicate genes with cumulative effect 9: 6: 1 e. Inhibitory genes 13: 3 4. Observe the genetic variations among inter and intra specific plants. 5. Demonstration of Breeding techniques-Hybridization, case studies of mutation, polyploidy, emasculation experiment. 	8
III	Biostatistics: <ol style="list-style-type: none"> 1. Univariate analysis of statistical data: Statistical tables, mean, mode, median, standard deviation and standard error (using seedling population / leaflet size). 2. Calculation of correlation coefficient values and finding out the probability. 3. Determination of goodness of fit in Mendelian and modified mono- and dihybrid ratios (3:1, 1:1, 9:3:3:1, 1:1:1:1, 9:7, 13:3, 15:1) by Chi-square analysis and comment on the nature of inheritance. 3. Computer application in biostatistics - MS Excel and SPSS 	7
IV	Plant tissue culture <ol style="list-style-type: none"> 1. Familiarization of instruments and special equipments used in the plant tissue culture experiments 2. Preparation of plant tissue culture medium, and sterilization, Preparation of stock solutions of nutrients for MS Media. 3. Surface sterilization of plant materials for inoculation (implantation in the medium) 4. Micropropagation of potato/tomato/ - Demonstration 5. Protoplast isolation and culturing – Demonstration 	8
V	Ecology & Environment <ol style="list-style-type: none"> 1. Ecological Adaptations: Hydrophytes, Xerophytes, Halophytes, Epiphytes and Parasites 2. Study of morphological adaptations of hydrophytes and xerophytes (four each). 3. Study of biotic interactions of: Stem parasite (Cuscuta), Root parasite (Orobanchae) Epiphytes, Predation (Insectivorous plants). 4. Observation and study of different ecosystems mentioned in the syllabus. 5. Field visit to familiarize students with ecology of different sites 	8
VI	Soil Formation, Properties & Conservation <ol style="list-style-type: none"> 1. Determination of pH of various soil and water samples (pH meter, universal indicator/Lovibond comparator and pH paper) 2. Analysis for carbonates, chlorides, nitrates, sulphates, organic matter and base deficiency from two soil samples by rapid field tests. 3. Determination of organic matter of different soil samples by Walkley & Black rapid titration method. 4. Soil Profile study 5. Soil types of India-Map 	8
VII	Biodiversity and Phytogeography: <ol style="list-style-type: none"> 1. Study of community structure by quadrat method and determination of (i) Minimal size of the quadrat, (ii) Frequency, density and abundance of components (to be done during excursion/field visit). 2. Marking of vegetation types of India, World & Uttar Pradesh on maps 	7

3. Phytogeographical areas of India														
VIII	Pollution & Waste management 1. Study of instruments used to measure microclimatic variables: Soil thermometer, maximum and minimum thermometer, anemometer, psychrometer/hygrometer, rain gauge and lux meter 2. Estimation of chloride and dissolved oxygen content in water sample 3. Comparative anatomical studies of leaves from polluted and less polluted areas. 4. Measurement of dissolved O ₂ by azide modification of Winkler's method. 5. Determination of dissolved oxygen of water samples from polluted and unpolluted sources. 6. Microbiological assessment of drinking water using MPN technique- water from well, river, water supply department and packaged drinking water 7. Making kitchen waste from compost/vermicompost by Enzymes/Bio decomposer/ Whey with dung. Climate Change, Carbon Credits & Role of GIS 1. Conducting Waste Audit of your Institution -Demo 2. Green auditing of the College/University -Demo	7												
<p>Suggested Readings: as in papers above: Course Books published in Hindi may be prescribed by the Universities.</p> <ol style="list-style-type: none"> 1. Practical Botany (Part III) Author: Sunil D Purohit, Anamika Singhvi & Kiran Tak 2013 Apex Publishing House, Raj. 2. Practical Botany (Part II) Author: N. C. Aery, Sunil D Purohit & Gotam K Kukda 2013 Apex Publishing House, Raj. 3. □□□□□□□□□□ □□□□□□ □□□□□□ □□□ 3 □□□□ □□□□ □□□□□□□□□□ □□□□ □□□□□ □□□□□□□□ □□□□□□ □□□□□□ □□□□□ 4. A Handbook Of Soil, Fertilizer And Manure (2nd Ed.) (pb) ISBN : 9788177544152 Edition : 02 Year : 2017 Author : Gupta PK Publisher : Agrobios (India) 5. Green Technology: An Approach For Sustainable Environment ISBN : 9788177543438 Edition : 01 Year : 2021 Author : Dr. Purohit SS Publisher : Agrobios (India) 6. Laboratory Manual Of Chemical And Bacterial Analysis Of Water And Sewage ISBN : 9788177540802 Edition : 01 Year : 2011 Author : Theroux FR , Eldridge EF , Mallmann WL Publisher : Agrobios (India) 7. Methods In Environmental Analysis: Water Soil And Air (2nd Ed.) ISBN : 9788177543087 Edition : 02 Year : 2021 Author : Gupta PK Publisher : Agrobios (India) 8. Water Treatment And Purification Technology ISBN : 9788177540024 Edition : 01 Year : 2009 Author : Ryan WJ Publisher : Agrobios (India) <p>http://vidyamitra.inflibnet.ac.in/index.php/home/subjects?domain=Life+Science&subdomain=Botany http://hecontent.upsc.gov.in/Home.aspx http://epathshala.nic.in/, http://epathshala.gov.in/)</p> <p>This course can be opted as an elective by the students of following subjects: Open to all but special for B.Sc. Biotech, B.Sc. Forestry, B.Sc. Agriculture, B. Pharma, B.Sc. Food Science, B.A. (Curators), B.A. Geology.</p> <p>Suggested Continuous Evaluation Methods: Continuous Internal Evaluation shall be based on allotted Assignment and Class Tests. The marks shall be as follows:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;">Internal Assessment</th> <th style="width: 20%;">Marks</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Class Interaction</td> <td style="text-align: center;">5</td> </tr> <tr> <td style="text-align: center;">Quiz</td> <td style="text-align: center;">5</td> </tr> <tr> <td style="text-align: center;">Seminar</td> <td style="text-align: center;">7</td> </tr> <tr> <td style="text-align: center;">Assignment (Charts/ Flora/ Rural Service/ Technology Dissemination)</td> <td style="text-align: center;">8</td> </tr> <tr> <td></td> <td style="text-align: center;">25</td> </tr> </tbody> </table>			Internal Assessment	Marks	Class Interaction	5	Quiz	5	Seminar	7	Assignment (Charts/ Flora/ Rural Service/ Technology Dissemination)	8		25
Internal Assessment	Marks													
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Course pre-requisites:

Qualification: To study this course, a student must have qualified 10+2 with Biology/ NSQF level 3 from Sector Skill Councils / Diploma holder from ITI in (Biology/ Agriculture/ Forestry/ Biotech/ Math/Statistics/Chemistry/ Computer Science)

Facilities: Smart and Interactive Class

Other Requisites: Video collection, Books, CDs, Access to On-line resources, Display Charts

Lab requisites: Biotech instruments, environmental lab instruments.

Suggested equivalent online courses:

<https://www.cytology-iac.org/educational-resources/virtual-slide-library>

https://www.asct.com/ASCTWeb/Content/Cytopreparation_Online_Course.aspx

<https://www.mooc-list.com/tags/genetics>

<https://www.coursera.org/learn/genetics-evolution>

<https://www.my-mooc.com/en/mooc/introduction-to-genetics-and-evolution/>

Further Suggestions: Access to Statistics, Chemistry, Math and Biotechnology resources will be required

Programme/Class: Bachelor of Science	Year: III	Semester: VI /Project-II/ Paper-IV
Subject: BOTANY		
Course Code: - B040604R	Course Title: Project in Botany for Graduation	
<p>Course outcomes: After completing this course a student will have:</p> <ul style="list-style-type: none"> ● Project work will supplement field experimental learning and deviations from classroom and laboratory transactions. ● project work will enhance the capability to apply gained knowledge and understanding for selecting, solving and decision-making processes ● It will promote creativity and the spirit of enquiry in learners. ● They will learn to consult Scientists, libraries, laboratories and herbariums and learn importance of discussions, Botanical & field trips, print and electronic media, internet etc. along with data documentation, compilation, analysis & representation in form of dissertation writing ● It will enhance their abilities, enthusiasm, and interest. 		
Credits: 03	Core: Compulsory	
Max. Marks: 25+75	Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week): 0-0-3.		
SUGGESTIVE LIST OF PROJECTS		

	<p>Prepare beds for growing nursery for herbs, shrubs and trees. Develop Green house facility in college and grow plants Develop hydroponics facility in college and grow plants. Develop botanical garden in the college with labelling Vertical gardens, roof gardens. Culture & art of making bonsai. Computer Aided Designing (CAD) for outdoor and indoor scaping Exposure to CAD (Computer Aided Designing) Phytochemical Analysis of Medicinal plants Bio composting and Vermicomposting. Performing Aromatherapy by essential Oils</p>										
	Refer: libraries, journals, Memoirs, encyclopaedias, herbaria, Museums, etc.										
	This course can be opted as an elective by the students of following subjects: This course can be opted as an elective by the students of following subjects: Open to all										
	Suggested Continuous Evaluation Methods:										
	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 70%;">Internal Assessment</th> <th style="width: 30%;">Marks</th> </tr> </thead> <tbody> <tr> <td>Class Interaction</td> <td>5</td> </tr> <tr> <td>Seminar</td> <td>10</td> </tr> <tr> <td>Thesis/dissertation</td> <td>10</td> </tr> <tr> <td></td> <td>25</td> </tr> </tbody> </table>	Internal Assessment	Marks	Class Interaction	5	Seminar	10	Thesis/dissertation	10		25
Internal Assessment	Marks										
Class Interaction	5										
Seminar	10										
Thesis/dissertation	10										
	25										
	<p>Course prerequisites: Qualification: To study this course, a student must have qualified 10+2 with Biology/ NSQF level 3 from Sector Skill Councils / Diploma holder from ITI in (Biology/ Agriculture/ Biotech/ Forestry/ Microbiology/Gardening /biomedical Science. Facilities: Smart and Interactive Class Other Requisites: All listed under all papers of the course.</p>										
	<p>Suggested equivalent online courses: https://ndl.iitkgp.ac.in/ http://heecontent.upsdc.gov.in/Home.aspx http://epathshala.nic.in/, http://epathshala.gov.in/) nptel.iitm.ac.in https://asiafoundation.org/what-we-do/books-for-asia?gclid=CjwKCAiA7939BRBMEiwA-hX5J-QhBITSyPnvj3r8yeio-L9f5uTy1a6oEoALCLa9Ebu0pyz858yQZxoC5wkQAvD_BwE http://www.dli.ernet.in/, http://www.ulib.org/ http://www.tkdl.res.in/, http://www.vigyanprasar.gov.in/digilib Directory of Open Access Repositories (DOAR)http://www.opendoar.org Registry of Open Access Repositories (ROAR)http://roar.eprints.org/ http://www.iscnagpur.ac.in/knowledge_learning_files/5.7_General_Open_Access_e-Resources.pdf</p>										



National Education Policy-2020
Common Minimum Syllabus for all U.P. State Universities/ Colleges
SUBJECT: GEOGRAPHY

Name	Designation	Affiliation
Steering Committee		
Mrs. Monika S. Garg, (I.A.S.), Chairperson Steering Committee	Additional Chief Secretary	Dept. of Higher Education U.P., Lucknow
Prof. Poonam Tandan	Professor, Dept. of Physics	Lucknow University, U.P.
Prof. Hare Krishna	Professor, Dept. of Statistics	CCS University Meerut, U.P.
Dr. Dinesh C. Sharma	Associate Professor	K.M. Govt. Girls P.G. College Badalpur, G.B. Nagar, U.P.
Supervisory Committee - Arts and Humanities Stream		
Prof. Divya Nath	Principal	K.M. Govt. Girls P.G. College Badalpur, G.B. Nagar, U.P.
Prof. Ajay Pratap Singh	Dean, Faculty of Arts	Ram Manohar Lohiya University, Ayodhya
Dr. Nitu Singh	Associate Professor	HNB Govt P.G College Prayagaraj
Dr. Kishor Kumar	Associate Professor	K.M. Govt. Girls P.G. College Badalpur, G.B. Nagar, U.P.
Dr. Shweta Pandey	Assistant Professor	Bundelkhand University, Jhansi

Syllabus Developed by:

S. N.	Name	Designation	Department	College/ University
1	Dr. Muraree Lal Meena	Associate Professor	Geography	Institute of Science, Banaras Hindu University, Varanasi (U.P.)-221005
2	Lt. (Dr.) Meenakshi Lohani	Assistant Professor	Geography	Km. Mayawati Government Girls P.G. College, Badalpur, Gautam Buddha Nagar, U.P.
3	Dr. Kashif Imdad	Assistant Professor	Geography	PPN PG College, Kanpur-208001

B.A. in Geography

PROGRAMME SPECIFIC OUTCOMES (PSOs)-

Program Outcome (After 3 Years of Study)

- a) This course provides the basic ideas and concepts of Physical & Human aspect of Geography.
- b) This course intends to orient the learner with the Approaches to the broader discipline of Geography.
- c) It will help in developing analytical and critical thinking based on the themes and issues of geography.
- d) It eventually prepares the students to understand the development of the subject and delve around issues suited to the needs of the contemporary world.
- e) It will help in exhaustive understanding of the basic concepts of Geography and an awareness of the emerging areas of the field.
- f) Acquisition of in-depth understanding of the applied aspects of Geography as well as interdisciplinary subjects in everyday life.
- g) Improvement of critical thinking and skills facilitating.
- h) The application of knowledge gained in the field of Geography in the classroom to the practical solving of societal problems.
- i) The programme orients students with tradition geographical knowledge along with advance contemporary skills like remote sensing and GIS.

- List of all papers in all six semesters.

Semester-wise Titles of the Papers in BA (Geography)

Year	Sem.	Course Code	Paper Title	Theory/Practical	Credits
1	I	A110101T	Physical Geography	Theory	4
1	I	A110102P	Elements of Map and Surveying	Practical	2
1	II	A110201T	Human Geography	Theory	4
1	II	A110202P	Thematic Mapping and Surveying	Practical	2
2	III	A110301T	Environment, Disaster Management and Climate Change	Theory	4
2	III	A110302P	Statistical Techniques and Surveying	Practical	2
2	IV	A110401T	Economic Geography	Theory	4
2	IV	A110402P	Weather Maps, Geological Maps and Surveying	Practical	2
3	V	A110501T	Regional Geography	Theory	4
3	V	A110502T	Basics of Remote Sensing and GIS	Theory	4
3	V	A110503R	Tour and Tour report	Practical	2
3	V	A110504R	Project Report-1	Practical	3
3	VI	A110601T	Geography of India	Theory	4
3	VI	A110602T	Evolution of Geographical Thoughts	Theory	4
3	VI	A110603P	Remote Sensing and GIS	Practical	2
3	VI	A110604R	Project Report-2	Practical	3

**BA 1st Year, Sem. I ,
Course I
(Theory)**

Programme/Class: Certificate/ BA	Year: First	Semester: First
Subject: Geography		
Course Code: A110101T	Course Title: Physical Geography	
<p>Course outcomes: Students will be able to understand</p> <ul style="list-style-type: none"> • The Earth geomorphic transition from beginning to present day. • Plate tectonics and related movements • Landforms carved by various agents of erosion • Earth's climate and that factors that influence it • Oceans system and biogeography of the world. 		
Credits: 4	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
I	Nature and Scope of Physical Geography, Origin of Universe, solar system and Earth. Geological Time Scale (with special reference to evidences from India), Interior of the Earth.	8
II	Origin of Continents and Oceans, Isostasy, Earthquakes and Volcanoes, Geosynclines, Continental Drift theory, Concept of Plate Tectonics.	8
III	Rocks, Folding, Faulting, Weathering, Erosion, Cycle of Erosion by Davis and Penck, Drainage Pattern.	8
IV	Fluvial, Karst, Aeolian, Glacial, and Coastal Landforms	8
V	Composition and Structure of atmosphere: Insolation, Atmospheric pressure and winds.	8
VI	Airmasses and Fronts, cyclones and anti-cyclones, Humidity, precipitation and rainfall types.	7
VII	Ocean Bottoms, composition of marine water-temperature and salinity. Circulation of Ocean water-Waves, Currents and Tides, Ocean deposits, Corals and atolls.	7

VIII	Biosphere, Biotic succession, Biome, Zoo-geographical regions of the world.	6
Suggested Readings:		
<ol style="list-style-type: none"> 1. Singh, Savindra (2018), Physical Geography (Eng./Hindi) Allahabad, India: Prayag Pustak 2. Huggett, R.J. (2007): <i>Fundamentals of Geomorphology</i>. New York, U.S.A.: Routledge. 3. Khullar, D.R. (2012). <i>Physical Geography</i>. New Delhi. India: Kalyani Publishers. 4. Strahler, A. H. and Strahler, A N. (2001): <i>Modern Physical Geography (4/E)</i>. New York, U.S.A.: John Wiley and Sons, Inc. 5. Thornbury, W. D. (2004): <i>Principal of Geomorphology</i>. New York, U.S.A.: Wiley. 6. Bloom, A. L. (2003). <i>Geomorphology: A Systematic Analysis of Late Cenozoic Landforms</i>, New Delhi, India: Prentice-Hall of India 		
This course can be opted as an elective by the students of following subjects: Open for all		
Suggested Continuous Evaluation Methods: Assignment / Test / Quiz (MCQ) / Seminar/ Presentations		
Suggested equivalent online courses: https://onlinecourses.swayam2.ac.in/cec21_hs03/preview https://onlinecourses.swayam2.ac.in/nos20_sc25/preview		

BA 1st Year, Sem. I
Course II
(Practical)

Program/Class: Certificate/BA	Year: First	Semester: First
Subject: Geography		
Course Code: A110102P	Course Title: Elements of Map and Surveying	
Course Learning Outcomes On completion of this course, learners will be able to: <ul style="list-style-type: none"> • Understand the basic idea of Map, Scale and Topographic sheets 		
Credits: 2		Core Compulsory
Max. Marks: -25+75		Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w		
Unit	Topics	No. of Lectures
I	Cartography: Nature and Scope. Scales–Concept and application; Graphical Construction of Plain, Comparative, Diagonal Scales and Vernier scale.	7
II	Map Projections: Classification, Properties and Uses; Graphical Construction of Polar Zenithal, Stereographic, Bonne’s and Mercator’s Projections, and reference to Universal Transverse Mercator (UTM) Projection.	7
III	Topographical Map: Coverage, Scale and Topo Symbol, Interpretation Survey of India Toposheets. Representation of landforms by Contours. Slope Analysis – Wentworth’s method.	8
IV	Basics of Surveying: Surveying: meaning, classification, merits and demerits. Plane Table Surveying.	8
Suggested Readings: <ol style="list-style-type: none"> 1. Monkhouse, F. J. and Wilkinson, F.J. (1985): Maps and Diagrams. Methuen, London 2. Raisz, E. (1962): General Cartography. John Wiley and Sons, New York. 5th edition. 3. Sarkar, A. K. (1997): Practical Geography: A Systematic Approach. Orient Longman, Kolkata. 4. Sharma, J. P. (2001): Prayogik Bhugol., Rastogi Publication, Meerut 3rd. edition. 5. Singh, R.L. and Singh, Rana P.B. (1993): Elements of Practical Geography. (Hindi and English editions). Kalyani Publishers, New Delhi,. 6. Singh, L.R. (2006): Fundamentals of Practical Geography, Sharda Pustak Bhawan, Allahabad. 		
This course can be opted as an elective by the students of following subjects: Open for all		

Note: In Final Examination Student shall be examined by external and internal examiners.

Marks Distribution: Written Exam, Viva, Practical File, Map Preparation, Topo sheet interpretation.

BA 1st Year, Sem. II
Course I
(Theory)

Program/Class: Certificate/BA	Year: First	Semester: Second
Subject: Geography		
Course Code:A110201T	Course Title: Human Geography	
<p>Course Learning Outcomes</p> <p>On completion of this course, learners will be able to:</p> <ul style="list-style-type: none"> • To understand the Concept, Nature, Meaning and Scope of Human Geography • To understand the natural and Cultural Changes in and around the Human Environs and their interrelationship. 		
Credits: 4		Core Compulsory
Max. Marks: -25+75		Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
I	Concept and Nature, Meaning and Scope of Human Geography. Development of Geographical understanding in India with special reference to Puranas.	7
II	Man and Environment relationship - Determinism, Possibilism, and Neo-determinism	7
III	Distribution of population and world pattern, global migration - causes and consequences, concept of over population and under population.	7
IV	Human Settlements: Origin, types (Rural-Urban) characteristics, House types and their distribution with special reference to India.	7
V	Primitive Economics-Food gathering, Hunting, Pastoral herding, Fishing, Lumbering and Primitive agriculture.	8
VI	Cultural Regions, Cultural Diffusion, Race, Religion and Language.	8
VII	World Tribes: Eskimos, Kirghiz, Bushman, Masai, Semang, Pygmies.	8
VIII	Indian Tribes: Bhotias, Gaddis, Tharus, Bhil, Gond, Santhal, Nagas.	8

Suggested Readings:

1. Chisholm, M. (1985): Human Geography, 2nd edition, Penguin Books, London.
2. B N Singh (2019) Manav Bhugol ka Swaroop, Pravalika Publication, Allahabad
3. de Blij, H.J.(1996): Human Geography: Culture, Society and Space,. 2nd edition. John Wiley and Sons, New York,
4. Haggett, P. (2004): Geography: A Modern Synthesis. 8th edition, Harper and Row, New York.
5. Hussain, M. (1994): Human Geography, Rawat Publications, Jaipur.
6. B N Singh (2021) Manav evam Arthik Bhugol, Pravalika Publication, Allahabad
7. Kaushik, S.D. and Sharma, A.K. (1996): Principles of Human Geography (in Hindi), Rastogi Publication, Meerut.
8. Norton, W. (2008): Human Geography, Oxford University Press, New York. 5th ed.
9. Singh, K. N. and Singh, J. (2001): Manav Bhugol. Gyanodaya Prakashan, Gorakhpur. 2nd edition.
10. Singh, L.R. (2005): Fundamentals of Human Geography, Sharda Pustak Bhawan, Allahabad
11. Smith, D. M.(1977): Human Geography- A Welfare Approach, Edward Arnold (Publishers) Ltd., London
12. Stoddard, R.H., Wishart, D.J. and Blouet, B.W. (1986): Human Geography. Prentice-Hall, Englewood Cliffs, New Jersey.
13. B N Singh (2020) Samajik aur Sanskritik Bhugol, Pravalika Publication, Allahabad
14. Johnston, R. J., Gregory, D., Pratt, G. and Watts, M. (2009): The Dictionary of Human Geography. 5th edition, Basil Blackwell Publishers, Oxford.
15. Ali, S. Muzafer (1966). Geography of the Puranas. New Delhi, People's Pub. House.

Suggested Continuous Evaluation Methods:

Assignment / Test / Quiz(MCQ) / Seminar/ Presentations

Course prerequisites: 12th Standard Pass/Open to all

Suggested equivalent online courses:

Courses on Swayam / MOOCs

https://onlinecourses.swayam2.ac.in/nou20_hs18/preview

BA 1st Year, Sem. II
Course II
(Practical)

Program/Class: Certificate/BA	Year: First	Semester: Second
Subject: Geography		
Course Code:A110202P	Course Title: Thematic Mapping and Surveying	
Course Learning Outcomes On completion of this course, learners will be able to: <ul style="list-style-type: none"> • Understand the basic idea of Map, Scale and Topographic sheets 		
Credits: 2	Core Compulsory	
Max. Marks: -25+75	Min. Passing Marks:40	
Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w		
Unit	Topics	No. of Lectures
I	Maps – Classification and Types, Principles of Map Design. Diagrammatic Data Presentation – Line, Bar and Circle.	7
II	Thematic Mapping Techniques – Properties, Uses and Limitations; Areal Data -- Choropleth, Dot, Proportional Circles; Point Data – Isopleths.	7
III	Cartographic Overlays – Point, Line and Areal Data. Thematic Maps – Preparation and Interpretation.	8
IV	Instrumental Survey: Prismatic Compass	8
Suggested Readings: <ol style="list-style-type: none"> 1. Monkhouse, F. J. and Wilkinson, F.J. (1985): Maps and Diagrams. Methuen, London 2. Raisz, E. (1962): General Cartography. John Wiley and Sons, New York. 5th edition. 3. Sharma, J. P. (2001): Prayogik Bhugol., Rastogi Publication, Meerut 3rd. edition. 4. Singh, R.L. and Singh, Rana P.B. (1993): Elements of Practical Geography. (Hindi and English editions). Kalyani Publishers, New Delhi,. 5. Singh, L.R. (2006): Fundamentals of Practical Geography, Sharda Pustak Bhawan, Allahabad. 6. Sharma, JP. (2008): Prayogatmak Bhugol Ki Rooprekha, Rastogi Publications-Meerut. 		
Note: In Final Examination Student shall be examined by external and internal examiners. Marks Distribution: Written Exam, Viva, Practical File, Map Preparation.		

BA 2nd Year, Sem. III
Course I
(Theory)

Programme/Class: Diploma/BA	Year: Second	Semester: Third
Subject: Geography		
Course Code: A110301T	Course Title: Environment, Disaster Management and Climate Change	
Course outcomes: Students will be able to understand		
<ul style="list-style-type: none"> • The course aim is to give basic understanding of concept Environment, Climate Change and Disaster Management. • Understanding of the concept of appraisal and conservation of Environment and Natural Resources. • It will help in developing understanding about various Impacts of Climate Change. • This course shall introduce the basic concepts related to disaster Management. • This paper shall help in understanding Global effort in field of disaster management. 		
Credits: 4		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks: 40
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
I	Concepts & components of Environment, Ecology and ecosystem. Indian traditional Knowledge in Environment and disaster Management.	8
II	Bio-diversity and its conservation, sustainable development.	8
III	Deforestation, soil erosion, soil exhaustion, Desertification, Air pollution, water pollution Disposal of solid waste.	8
IV	Ganga Action Plan, Tiger project, Tehri dam & Narmada Valley project.	8
V	Science of Climate Change: Understanding Climate Change; Green House Gases and Global Warming.	8
VI	Global Climatic Assessment – IPCC, Impacts of Climate Change, National Action Plan on Climate Change.	7
VII	Disasters, Hazards, Risk, Vulnerability, Type of Disasters, Disaster Management, Disaster	7

	Management Cycle.	
VIII	Flood, Drought, Cyclone, Earthquake, Tsunami, Landslide, Chemical and Nuclear Disasters. Do's and Don'ts During Disasters.	6

Suggested Readings:

1. Casper J.K. (2010). *Changing Ecosystems: Effects of Global Warming*. New York, USA: Infobase Pub.
2. Hudson, T. (2011). *Living with Earth: An Introduction to Environmental Geology*. Delhi, India: PHI Learning Private Limited.
3. Miller, G.T. (2007). *Living in the Environment: Principal, Connections, and Solutions*. Belmont, Australia: Brooks/ Cole Cengage Learning.
4. Singh, R.B. (1993) *Environmental Geography*. Delhi, India: Heritage Publishers.
5. UNEP. (2007). *Global Environment Outlook: GEO4: Environment For Development, United Nations Environment Programme*. UK: University Press, Cambridge.
6. Government of India. (2011). *Disaster Management in India*. Delhi, India: Ministry of Home Affairs.
7. Singh, Savendra (2019) *Pryavaran Bhugol*, Pravalika Publication, Allahabad
8. Kapur, A. (2010). *Vulnerable India: A Geographical Study of Disasters*. Delhi, India: Sage Publication.
9. Singh, Savendra (2019) *Apada Prabandhan*, Pravalika Publication, Allahabad.
10. Ramkumar, M. (2009). *Geological Hazards: Causes, Consequences and Methods of Containment*. New Delhi, India: New India Publishing Agency.
11. Climate Change: Understanding Climate Change; Green House Gases and Global Warming; Global Climatic Assessment- IPCC
12. Climate Change and Vulnerability: Physical Vulnerability; Economic Vulnerability; Social Vulnerability.
13. Impact of Climate Change: Agriculture and Water; Flora and Fauna; Human Health
14. Adaptation and Mitigation: Global Initiatives with Particular Reference to South Asia.
15. The Climate Change Policy Framework: Global Initiatives UNFCCC and COPs; National and Local Action Plan on Climate Change.
16. Government of India. (2008). *Vulnerability Atlas of India*. New Delhi, India: Building Materials & Technology Promotion Council, Ministry of Urban Development, Government of India
17. Modh, S. (2010). *Managing Natural Disaster: Hydrological, Marine and Geological Disasters*. Delhi, India: Macmillan.
18. Bansal SC,(2020) *Jalvayu vigyan evam Samudra Vigyan*, Meenakshi Publication, Meerut.
19. Bansal SC,(2019) *Prayavarn ek adhyan*, Meenakshi Publication, Meerut.

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:
Assignment / test / Quiz(MCQ) / Seminar/ Presentations

Suggested equivalent online courses:

https://onlinecourses.swayam2.ac.in/aic19_ge05/preview

https://onlinecourses.swayam2.ac.in/nou21_bt03/preview

BA 2nd Year, Sem. III
Course II
(Practical)

Programme/Class: Diploma/BA	Year: Second	Semester: Third
Subject: Geography		
Course Code: A110302P	Course Title: Statistical Techniques and Surveying	
<p>Course outcomes: Students will be able to understand</p> <ul style="list-style-type: none"> • To differentiate between qualitative and quantitative information. • To understand the nature of various data. • To understand sampling methods for data collection. • To present data through graphical and diagrammatic formats. • To use the concept of probability mainly the normal distribution. 		
Credits: 2	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): P- 2/w		
Unit	Topics	No. of Lectures
I	Use of Data in Geography: Significance of Statistical Methods in Geography; Sources of Data, Scales of Measurement (Nominal, Ordinal, Interval, Ratio)	8
II	Tabulation and Descriptive Statistics: Frequency Distribution Table, Cross Tabulation, Graphical Presentation of Data (Bar diagram, Histograms, Frequency Curve and Cumulative Frequency Curves), Measurement of Central Tendencies (Mean, Median and Mode), Measurement of Partitions (Deciles, Quartiles and Percentiles), Dispersion (Standard Deviation, Variance and Coefficient of Variation).	8
III	Sampling: Probability sampling Non-probability sampling. Correlation: Rank Correlation and Product Moment Correlation.	7
IV	Instrumental Survey: Sextant	7
<p>Suggested Readings:</p> <ol style="list-style-type: none"> 1. Berry B. J. L. and Marble D. F. (eds.): Spatial Analysis – A Reader in Geography. 2. Ebdon D., 1977: Statistics in Geography: A Practical Approach. 3. Davis, R.E. and Foote, F.S. (1953): Surveying, 4th edition, McGraw Hill 		

Publication, New York

4. Sharma, JP (2001) Prayogik Bhugol, Rastogi Publication, Meerut
5. Hammond P. and McCullagh P. S., 1978: Quantitative Techniques in Geography: An Introduction, Oxford University Press.
6. Sharma, PM, (2009) Bhugol Me sankhkiya Vidhyan, Rajasthan Granth Accademy, Jaipur
7. Bansal SC,(2020) Shodh vidhitantra va sankhikiya Vishyan, RK Books Publication, New Delhi.
8. King L. S., 1969: Statistical Analysis in Geography, Prentice-Hall.
9. Mahmood A., 1977: Statistical Methods in Geographical Studies, Concept.
10. Pal S. K., 1998: Statistics for Geoscientists, Tata McGraw Hill, New Delhi.
11. Sarkar, A. (2013) Quantitative geography: techniques and presentations. Orient Black Swan Private Ltd., New Delhi
12. Silk J., 1979: Statistical Concepts in Geography, Allen and Unwin, London.
13. Spiegel M. R.: Statistics, Schaum's Outline Series.
14. Yeats M., 1974: An Introduction to Quantitative Analysis in Human Geography, McGraw Hill, New York.

This course can be opted as an elective by the students of following subjects: Open for all

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Note: In Final Examination Student shall be examined by external and internal examiners.
Marks Distribution: Written Exam, Viva, Practical File, Instrumental Surveys.

BA 2nd Year, Sem. IV
Course I
(Theory)

Program/Class: Diploma /BA	Year: Second	Semester: Fourth
Subject: Geography		
Course Code: A110401T	Course Title: Economic Geography	
<p>Course Learning Outcomes</p> <p>On completion of this course, learners will be able to:</p> <ul style="list-style-type: none"> • Define Meaning, concepts and approaches of Economic Geography • Understand the nature of Economic activities, Resource Distribution • Understand the Effect of globalization on developing countries. 		
Credits: 4	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks:40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
I	Meaning, concepts and approaches of Economic Geography; agricultural region of the world (Derwent Whittlesey).	8
II	Resource: meaning, concept and classification. Spatial organization of economic activities.	8
III	Economic organization of space, Forestry, fishing and mining activities.	7
IV	Agricultural typologies, agricultural land use model (J.H. Von Thunen)	7
V	Types of industries; Factors of location of industries; iron and steel industry, cotton textiles and sugar; Theory of industrial location (Alfred Weber).	8
VI	World transportation: Sea routes and major trans-continental railways.	8
VII	WTO and International trade: Patterns and trends	7
VIII	Effect of globalization on developing countries.	7
<p>Suggested Readings:</p> <ol style="list-style-type: none"> 1. B N Singh (2021) Manav evam Arthik Bhugol, Pravalika Publication, Allahabad 2. Bryson, J., Henry, N., Keeble, D. and Martin, R. (eds.) (1999): The Economic Geography Reader: Producing and Consuming Global Capitalism. John Wiley and Sons, Inc, New York. 3. Clark, G. L., Gertler, M. S. and Feldman, M. P. (eds.) (2000): The Oxford Handbook of Economic Geography. Oxford University Press, USA. 		

4. Coe, N. (2007): Economic Geography: A Contemporary Introduction. Blackwell Publishers, Inc., Massachusetts.
5. Gautam, A. (2006): Aarthik Bhugol Ke Mool Tattava, Sharda Pustak Bhawan, Allahabad.
6. Guha, J. S. and Chattoraj, P.R. (2002): A New Approach to Economic Geography: A Study of Resources. The World Press Private Limited, Kolkata.
7. Hanink, D. M. (1997): Principles and Applications of Economic Geography: Economy, Policy, Environment. John Wiley and Sons, Inc, New York.
8. Hartshorne, T. A. and Alexander, J. W. (1988): Economic Geography (3rd revised edition) Englewood Cliff , New Jersey, Prentice Hall
9. Hudson, R. (2005): Economic Geographies: Circuits, Flows and Spaces. Sage Publications, London.
10. Knowles, R, Wareing, J. (2000): Economic and Social Geography Made Simple, Rupa and Company, New Delhi.
11. Sokal, Martin 2011. Economic Geographics of Globalisation: A short Introduction. Cheltenham, UK : Edward Elgar.
12. Alexander, J. W. (1988): Economic Geography. Prentice-Hall, New Delhi,

Suggested Continuous Evaluation Methods:

Assignment / test / Quiz(MCQ) / Seminar/Presentations

Suggested equivalent online courses:

Courses on Swayam / MOOCs

https://onlinecourses.nptel.ac.in/noc21_hs50/preview

BA 2nd Year, Sem. IV
Course II
(Practical)

Program/Class: Diploma /BA	Year: Second	Semester: Fourth
Subject: Geography		
Course Code:A110402P	Course Title: Weather Maps, Geological Maps and Surveying	
<p>Course Learning Outcomes</p> <p>On completion of this course, learners will be able to:</p> <ul style="list-style-type: none"> • Identify the various Survey Operations and Survey Instruments • To understand the idea of Basic and applied Instrumental surveying 		
Credits: 2		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w		
Unit	Topics	No. of Lectures
I	Weather Maps, Study and Interpretation of Weather Map, Weather Forecasting.	7
II	Geological Maps: Types, Signs, Bed and Bedding plane, Rock Outcrop, Dip, Strike etc. Construction of Geological Sections.	7
III	Instrumental Survey: Indian Clinometer.	8
IV	Instrumental Survey: Theodolite	8
<p>Suggested Readings:</p> <ol style="list-style-type: none"> 1. Sharma, JP (2001) Prayogik Bhugol, Rastogi Publication, Meerut 2. Jones, P.A.(1968): Fieldwork in Geography, Longmans, Green and Company Ltd., First Publication, London 3. Kanetker, T.P. and Kulkarni, S.V.(1967): Surveying and Levelling, Vol I and II V.G. Prakashan, Poona. 4. Natrajan, V. (1976): Advanced Surveying, B.I. Publications., Mumbai. 5. Pugh, J.C. (1975): Surveying for Field Scientists, Methuen and Company Ltd., London, First Publication. 6. Punmia, B.C.(1994): Surveying, Vol I, Laxmi Publications Private Ltd, New Delhi. 7. Shephard, F.A. (1968): Surveying Problems and Solutions, Edward Arnold (Publishers) Ltd, London 8. Singh, R.L. and Singh, Rana P.B. (1993): Elements of Practical Geography. (Hindi and English editions), Kalyani Publishers, Ludhiana and New Delhi. 9. Venkatramaiah, C. (1997): A Text Book of Surveying, Universities Press, Hyderabad. 10. Davis, R.E. and Foote, F.S. (1953): Surveying, 4th edition, McGraw Hill Publication, New York. 		

Note: In Final Examination Student shall be examined by external and internal examiners.
Marks Distribution: Written Exam, Viva, Practical File, Instrumental Surveys.

BA 3rd Year, Sem. V
Course I
(Theory)

Programme/Class: Degree/BA	Year: Third	Semester: Fifth
Subject: Geography		
Course Code: A110501T	Course Title: Regional Geography	
<p>Course outcomes: Students will be able to understand</p> <ul style="list-style-type: none"> • To understand the concept of Region and Regional Planning. • To familiarize the students with Theories and Models for Regional Planning. • To develop understanding about concept of Development, Sustainable Development and Multi level planning. 		
Credits: 4		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks: 40
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
I	Definition of Region, Evolution and objectives of regional planning. Planning practices in Ancient India.	8
II	Types of Regional planning, Formal, Functional, and Planning Regions.	8
III	Delimitations of Region and Regional Planning.	8
IV	Theories and Models for Regional Planning: Growth Pole Model of Perroux; Myrdal, Hirschman, Rostow and Friedmann.	8
V	Sustainable Development, Concept of Development and Underdevelopment.	8
VI	Efficiency-Equity Debate: Definition, Components and Sustainability for Development.	7
VII	Indicators (Economic, Social and Environmental).	7
VIII	Need for regional planning in India, Five Year Plans and Regional Planning, multi- level planning in India.	6
<p>Suggested Readings:</p> <ol style="list-style-type: none"> 1. Agyeman, Julian, Robert, D. Bullard and Bob, Evans. (Eds.) (2003). <i>Just Sustainabilities: Development in an Unequal World</i>. London: Earthscan. (Introduction and conclusion.). 2. Anand, Subhash., (2011). <i>Ecodevelopment : Glocal Perspectives</i>. New Delhi, India: Research India Press. 		

3. Misra, R. P., Sundaram, K.V., and Rao, V.L.S. (1974). *Regional Development planning in India*. Delhi, India: Vikas Publishing House.
4. Singh, M B, () Pradeshik Vikas Niyogan, Tara Book Agency, Varanasi.
5. Peet, R. (1999). *Theories of Development*. New York, USA: The Guilford Press.
6. Berry, B.J.L. and Horton, F.F. (1970): *Geographic Perspectives on Urban Systems*. Prentice Hall, New Jersey.
7. Bhat L.S. (1972): *Regional Planning In India*, Statistical Publishing Society
8. Blij H. J. De, 1971: *Geography: Regions and Concepts*, John Wiley and Sons.
9. Kulshetra ,S.K,(2012) : *Urban and Regional Planning in India : A hand book for Professional Practioners* , Sage Publication , New Delhi
10. Kundu, A. (1992): *Urban Development Urban Research in India*, Khanna Publ. New Delhi.
11. Misra , R.P, Sundaram K.V, PrakashRao , VLS(1974): *Regional Development Planning in India* , Vikas Publication , New Delhi.
12. Misra, R.P (1992): *Regional Planning: Concepts , techniques , Policies and Case Studies* , Concept , New Delhi
13. Friedmann, J. and Alonso W. (1975). *Regional Policy - Readings in Theory and Applications*. Massachusetts, USA: MIT Press.

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:
Assignment / test / Quiz(MCQ) / Seminar/ Presentations

Suggested equivalent online courses:
https://onlinecourses.swayam2.ac.in/aic19_ge05/preview

BA 3rd Year, Sem. V
Course II
(Theory)

Program/Class: Degree /BA	Year: Third	Semester: Fifth
Subject: Geography		
Course Code:A110502T	Course Title: Basics of Remote Sensing and GIS	
Course Learning Outcomes On completion of this course, learners will be able to: <ul style="list-style-type: none"> • Understand the Basic idea and application of Remote sensing Techniques and Geographical Information System 		
Credits: 4		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
I	Remote Sensing: Definition, Type, Scope and Historical Development. Types of Satellites.	7
II	Electro-magnetic radiation: Characteristics, spectral regions and bands. Stages or Process of Remote Sensing.	7
III	Remote sensing satellites: Platform and sensors. Resolution: Spatial, Spectral, Temporal, Radiometric Resolution.	8
IV	Remote Sensing data processing and applications: Visual and digital image processing techniques.	8
V	Remote Sensing applications in Urban Planning, Agriculture, Forestry, Land use/Land cover Mapping, Oceanic Studies and Disaster Management.	6
VI	Introduction to GIS: Definition, concept and history of GIS.	8
VII	Computer fundamentals for GIS, GIS Packages like ARC GIS, ERDAS, QGI etc.	8
VIII	Coordinate system, Datum, Raster and vector data.	8
Suggested Readings: <ol style="list-style-type: none"> 1. Choniyal, D D, (2016) Sudur Samvaden evam Bhogolic Suchna Pranali ke sighant, Sharda Pustak Bhavan, Allahabad. 2. Lillesand, T.M. and Kiefer, R.W. (2000): Remote Sensing and Image Interpretation. 4th edition. John Wiley and Sons, New York 3. Campbell, J.B. (2002): Introduction to Remote Sensing. 5th edition, Taylor and Francis, London 4. Bhatta, B. (2010): Remote Sensing and GIS, Oxford University Press, New Delhi. 5. Nag Prithvish and Kudrat M. (1998): Digital Remote Sensing, Concept Publishing Company, New Delhi 6. Curran, P.J. (1985): Principles of Remote Sensing, Longman, London. 		

Suggested Continuous Evaluation Methods:
Assignment / test / Quiz(MCQ) / Seminar/Presenatations

Suggested equivalent online courses: Courses on Swayam / MOOCs
https://onlinecourses.swayam2.ac.in/aic20_ge05/preview

**BA 3rd Year, Sem. V,
Course III
(Practical)**

Programme/Class: Degree/BA	Year: Third	Semester: Fifth
Subject: Geography		
Course Code: A110503R	Course Title: Tour and Tour report	
<p>Course outcomes: Students will be able to understand</p> <ul style="list-style-type: none"> • The variation among geographical locations. • Interaction with people with different natural and cultural settings. • Study physical and human geography of area being visited. • Learn to prepare tour report. 		
Credits: 2	Core Compulsory	
Max. Marks: 100	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): P- 2/w		
Unit	Topics	No. of Lectures
I	How to prepare Field Book, steps and methods for preparing Tour report, Methodology for Research in Field Trip, Various aspects of study in Field Trip, Preparation of Surveying in Field Trip. (30 lectures shall be taken before and during field trip)	30
Suggested Readings:		
This course can be opted as an elective by the students of following subjects: Open for all.....		
Suggested Continuous Evaluation Methods:		
The following shall be the guidelines and structure of Educational tour;		
Geographical Excursion Committee		
<ol style="list-style-type: none"> 1. All faculty members shall organize geographical excursion as 'tour in-charge' in rotation according to departmental seniority list. 2. There shall be Geographical Excursion Committee headed by HOD in University and Principal in colleges. Tour in-charge shall act as convener of committee and shall convene a meeting at the beginning of session or semester. All other teachers of department shall be member of committee. Four/Five meritorious students based on last available examination result shall be invited by the tour in-charge to participate in meeting as members of committee. 3. Committee shall: <ol style="list-style-type: none"> a) Review the tour plan. b) Confirm that all arrangements shall be made in advance before tour departure. 		

- c) Listen to the opinion of students and give recommendations to tour in-charge accordingly.
- d) Review academic nature of tour and evaluate day wise tour plan and academic activity as submitted by Tour in-charge.

Structure of the tour party

1. For 20 or less than 20 students one faculty member with one non teaching staff shall accompany the Tour party. For 21 to 50 students two faculty members with one non teaching staff shall accompany the Tour party. If two faculty members are required for tour, second faculty member shall be selected on the recommendation of tour in-charge. If students are more than 50 then a separate tour batch shall be constituted in same manner.
2. If female students are also participating in tour and tour in-charge, accompany other faculty member or Non teaching staff none are female then one female attended (Female faculty member from Geography or any other departments/female non teaching staff) shall accompany with tour party.

Responsibility of tour in-charge

1. Tour shall at least of 6 days stay at location with inter region variation.
2. Tour in-charge shall submit tentative day wise activity report in advance to HOD in University and Principal in colleges.
3. Tour in-charge shall coordinate with Institutes/Colleges/ Universities/Research institutes etc in location where tour is being planned for following activities like;
 - a) Interaction of students.
 - b) Lectures on various local physical and cultural attributes of the area by the experts.
 - c) Local visit with faculty members having academic understanding of the area.
4. Lectures by tour in-charge on physical and human characteristics of area being visited for educational tour.
5. Survey with students with at least one instrument like Dumpy Level, Sextant, Theodolite, GPS etc.
6. Questionnaire survey on various socio-cultural or any other aspects. Questionnaire must be prepared in advance and shall be shared during Geographical Excursion Committee meeting.
7. Tour in-charge shall collect undertaking from all students which shall be counter signed by their guardian.
8. Tour in-charge will prepare list of students accompanying the tour with their information like mobile number, address, guardian contact information and one recent color photo. One copy will also be submitted to the head in universities and Principal in colleges.
9. Teacher shall always try to minimize tour expenditure of students by;
 - a) Using concession train reservation and avoiding buses if possible.
 - b) Making stay arrangements of students in advance in youth hostels/lodges/guest

house etc.

- c) Try to visit few important locations only with objective of spot study and avoiding unnecessary travel for sightseeing.

10. After the completion of tour there shall be presentation by students regarding learning outcomes and experiences under the supervision of tour in-charge. Presentation shall be attended by Geographical Excursion Committee members along with other faculty members, staff, students etc.
11. All students shall submit tour report under supervision of Tour in-charge for evaluation. Tour report shall portray all activities conducted and places visited for the purposes of study.
12. In case of any incident/injury where one or more than one student can't join tour party in return journey. One teaching/non teaching staff member shall stay with student until student's guardian arrives or alternative arrangement is not made by the college. In case tour in-charge stays the other teacher/staff member shall act as tour in-charge for remaining tour period according to seniority.

Exemption of Students from Tour

1. Tour can be exempted in very special circumstances on recommendation of tour in-charge and head (in University) or Principal (in Colleges). Exempted students will prepare local tour report based on his/her own local tour visits. Report shall be prepared under supervision of tour in-charge.

TA, DA and other expenses

1. The TA, DA and other expenses of teachers and attendants shall be met out by college as admissible to their cadre as per government rules.

Suggested equivalent online courses

**BA 3rd Year, Sem. V,
Course III
(Practical)**

Programme/Class: Degree/BA	Year: Third	Semester: Fifth
Subject: Geography		
Course Code: A110504R	Course Title: Project Report-1	
Course outcomes: Students will be able to understand <ul style="list-style-type: none"> • In-depth knowledge of research methodology. • Learn to prepare Project Report. 		
Credits: 3	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): P- 2/w		
Unit	Topics	No. of Lectures
I	Meaning, types and significance of Research, Literature review and formulation of research design, research problem, objectives, hypothesis, Research materials and methods, Sampling etc. Techniques of writing scientific reports: Preparing notes, references, bibliography, abstract and keywords etc. Note: 1. Each faculty member shall teach these topics of research to his/her Group of students independently. 2. Student shall choose supervisor according to his/her research interest and specialisation of Faculty member.	30
Suggested Readings:		
This course can be opted as an elective by the students of following subjects: Open for all		
Suggested Continuous Evaluation Methods: Seminar, Presentations, VIVA		
Suggested equivalent online courses		

**BA 3rd Year, Sem. VI,
Course I
(Theory)**

Program/Class: Degree /BA	Year: Third	Semester: Sixth
Subject: Geography		
Course Code:A110601T	Course Title: Geography of India	
Course Learning Outcomes		
On completion of this course, learners will be able to:		
<ul style="list-style-type: none"> • Understand the importance of “Ek Bharat Shrestha Bharat” • Understand the wider aspects of Geography of India 		
Credits: 4	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
I	Space relationship of India with neighbouring countries; Structure and relief; Drainage system and watersheds; Physiographic regions; Ek Bharat Shrestha Bharat: A Geographical Prospective.	8
II	Mechanism of Indian monsoons and rainfall patterns, Tropical cyclones, and western disturbances; Floods and droughts; Climatic regions; Natural vegetation; Soil types and their distributions.	8
III	Resources: Land, surface and groundwater, energy, minerals, biotic and marine resources; Forest and wildlife resources and their conservation; Energy crisis.	7
IV	Industry: Evolution of industries; Locational factors of industries; Industrial houses and complexes including public sector undertakings; Industrial regionalization; New industrial policies; Special Economic Zones; Tourism including eco-tourism.	7
V	Cultural Setting: Historical Perspective of Indian Society; Racial, linguistic and ethnic diversities; religious minorities; major tribes, tribal areas, and their problems; cultural regions.	8
VI	Population: Growth, distribution, and density of population; Demographic attributes: sex-ratio, age structure, literacy rate, work-force, dependency ratio, longevity; migration (inter-regional, intraregional and international) and associated problems; Population problems and policies; Health indicators.	8

VII	Agriculture: Infrastructure: irrigation, seeds, fertilizers, power; Institutional factors: landholdings, land tenure, and land reforms; Cropping pattern, agricultural productivity, agricultural intensity, crop combination, land capability; Agro and social-forestry; Green revolution and its socio-economic and ecological implications.	6
VIII	Settlements: Types, patterns, and morphology of rural settlements; Urban developments; Morphology of Indian cities; Functional classification of Indian cities; Conurbations and metropolitan regions; urban sprawl; Slums and associated problems; town planning; Problems of urbanization and remedies.	8
<p>Suggested Readings:</p> <ol style="list-style-type: none"> 1. Chauhan, P.R. and Prasad, M. (2003): Bharat Ka Vrihad Bhugol, Vasundhara Prakashan, Gorakhpur. 2. Farmer, B.H. (1983): An Introduction to South Asia. Methuen, London 3. Gautam, A. (2006): Advanced Geography of India, Sharda Pustak Bhawan, Allahabad 4. Johnson, B.L.C. (1963): Development in South Asia. Penguin Books, Harmondsworth 5. Krishnan, M.S. (1982): Geology of India and Burma, CAS Publishers and Distributors, Delhi. 6. Bansal SC,(2018) Bharat Ka Bhugol, Meenakshi Publication, New Delhi, Meerut. 7. Nag, P. and Gupta, S. S. (1992): Geography of India, Concept Publishing Company, New Delhi. 8. Rao, B.P. (2007): Bharat kee Bhaugolik Sameeksha, Vasundhara Prakashan, Gorakhpur. 9. Sharma, T.C. and Coutinho, O. (2003): Economic and Commercial Geography of India, Vikas Publishing House Private Ltd. New Delhi. 10. Singh , J. (2003): India: A Comprehensive Systematic Geography. Gyanodaya Prakashan, Gorakhpur 11. Singh, J. (2001): Bharat: Bhougolik Aadhar Avam Ayam, Gyanodaya Prakashan, Gorakhpur.(Hindi) 12. Singh, R.L. (ed.) (1971): India: A Regional Geography. National Geographical Society of India, Varanasi. 13. Spate, O.H. K., Learmonth A. T. A. and Farmer, B. H. (1996): India, Pakistan and Sri Lanka. Methuen, London, 7th edition. 14. Sukhwal, B.L. (1987): India: Economic Resource Base and Contemporary Political Patterns. Sterling Publication, New Delhi 15. Tiwari, R.C. (2007): Geography of India, Prayag Pustak Bhawan, Allahabad. 16. Wadia, D. N. (1959): Geology of India. Mac-Millan and Company, London and student edition, Madras. 17. Khullar, D.R. (2007): India: A Comprehensive Geography, Kalyani Publishers, New Delhi. 		
<p>Suggested Continuous Evaluation Methods: Assignment / test / Quiz(MCQ) / Seminar/ Presentations</p>		

Suggested equivalent online courses: Courses on Swayam / MOOCs
https://onlinecourses.swayam2.ac.in/nou20_ag10/preview

**BA 3rd Year, Sem. VI,
Course II
(Theory)**

Program/Class: Degree /BA	Year: Third	Semester: Sixth
Subject: Geography		
Course Code:A110602T	Course Title: Evolution of Geographical Thought	
Course Learning Outcomes On completion of this course, learners will be able to:		
<ul style="list-style-type: none"> • Understand the contribution of Indian and other renowned Geographers • Understand the concept of evolution of Geographical Thought. 		
Credits: 4	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks:40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
I	Contribution of Indian Geographers in Ancient India.	7
II	Early Origins of Geographical Thinking, Concepts of distributions; relationships, interactions, area differentiation and spatial organization in Geography	7
III	Dualisms in geography; systematic & Regional geography, physical & human geography, Systematic and with regional geography. The myth and reality about dualisms.	8
IV	Contribution of Greek & Roman geographers in ancient world.	7
V	Contribution of Arab geographers in Middle ages, Renaissance period in Europe. Renowned travelers and their geographical discoveries.	8
VI	German school of thought - Kant, Humboldt, Ritter, Richthofen, Ratzel, Hettner French school of thought - Contribution of Blache & Brunhes.	8
VII	Soviet geographers, American school - Contribution of Sample, Hunthington & Carl Sauer. British school - Contribution of Mackinder, Herbertson & L.D. Stamp.	7
VIII	Paradigms in Geography, Thomas Kuhn theory about the growth and development of science. Application of Kuhn Model in Geography.	8
Suggested Readings:		
<ol style="list-style-type: none"> 1. Ali, S.M. (1960): Arab Geography, Institute of Islamic Studies, Aligarh Muslim University, Aligarh, First Edition. 2. Daniel, P., Bradshaw, M., Shaw, D. and Sidaway, J. (2000): Human Geography. Issues for the 21st Century. Prentice Hall, London. 3. Diddee, J. (ed.) (1990): Indian Geography, Institute of Indian Geographers, Pune, 		

first edition.

4. Dikshit, R. D. (2003): Geographical Thought. A Critical History of Ideas. Prentice-Hall of India, New Delhi. (in English and Hindi).
5. Dube, B. (1967): Geographical Concepts in Ancient India, National Geographical Society of India, Varanasi
6. Getice, A., Getis, J. and Fellman, J. D. (2007): Introduction to Geography. 10th edition. McGraw Hill, New York.
7. Hartshorne, R. (1959): Perspective on the Nature of Geography, John Murray, London
8. Harvey, D. (1969): Explanations in Geography. Arnold, London.
9. Holt-Jensen, A. (1980): Geography: Its History and Concepts. Harper and Row Publishers, London.
10. Husain, Majid. (2002): Evolution of Geographical Thought, Rawat Publications, Jaipur.
11. Johnston, R., Gregory, D., Pratt, G., Watts, M. and Whatmore, S. (2003): The Dictionary of Human Geography. Blackwell Publishers, Oxford. 5th edition.
12. Johnston, R. and Sidaway, J.D. (2004): Geography and Geographers: Anglo-American Human Geography Since 1945, Arnold Publishers, London.
13. Rawling, E. and Daugherty, R. (eds.) (2005): Geography into the Twenty-first Century. 2nd edition. John Wiley and Sons, Chichester.
14. Taylor, G. (ed.) (1953): Geography in the Twentieth Century. Methuen and Company, London.

Suggested Continuous Evaluation Methods:

Assignment / test / Quiz(MCQ) / Seminar/ Presentation

Suggested equivalent online courses:

Courses on Swayam / MOOCs

https://onlinecourses.swayam2.ac.in/cec21_lg06/preview

**BA 3rd Year, Sem. VI,
Course III
(Practical)**

Program/Class: Degree/BA	Year: Third	Semester: Sixth
Subject: Geography		
Course Code: A110603P	Course Title: Remote Sensing and GIS	
<p>Course Learning Outcomes On completion of this course, learners will be able to:</p> <ul style="list-style-type: none"> • Understand and Conceptualize Remote Sensing and GIS Technique • Understand the use of various image processing Software • Basic idea of Geographical Information System 		
Credits: 2	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks:40	
Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w		
Unit	Topics	No. of Lectures
I	Overview of image processing & GIS Packages (Including open source Software's). – ARC GIS, ERDAS, MAP INFO, ILWIS, GEOMEDIA, IDRISI, GRASS, SAGA, QGIS.	5
II	Creation of Shape File in GIS Software's. Coordinate system and projections in GIS Software's. GIS Data Structures: Types (spatial and Non-spatial), Raster and Vector Data Structure.	5
III	Geo-Referencing of Maps. Creation of Point, Line and Polygon Files and features. Preparation of Maps with Legend, Scale, North Arrow etc and Export of Map in various Formats.	10
IV	Downloading of Remote sensing Images from various online platforms (like Bhuvan, USGS, ASF, Copernicus etc). Land use Classification (Supervised and Un-supervised) using downloaded images and GIS Packages.	10
<p>Suggested Readings:</p> <ol style="list-style-type: none"> 1. Curran, P.J. (1985): Principles of Remote Sensing, Longman, London 2. Chaunial, D. D. (2004): Remote Sensing and Geographical Information System(in Hindi), Sharda Pustak Bhawan, Allahabad 3. Cracknell, A. and Ladson, H. (1990): Remote Sensing Year Book. Taylor and Francis, London. 4. Curran, P.J. (1985): Principles of Remote Sensing. Longman, London. 5. Deekshatulu, B.L. and Rajan, Y.S. (ed.) (1984): Remote Sensing. Indian Academy of Science, Bangalore. 6. Floyd, F. and Sabins, Jr. (1986): Remote Sensing: Principles and Interpretation. W.H. Freeman, New York. 		

7. Gautam, N.C. and Raghavswamy, V. (2004). Land Use/ Land Cover and Management Practices in India. B.S. Publication., Hyderabad.
8. Jensen, J.R. (2004): Remote Sensing of the Environment: An Earth Resource Perspective. Prentice Hall, Englewood Cliffs, New Jersey. Indian reprint available.
9. Lillesand, T.M. and Kiefer, R.W. (2000): Remote Sensing and Image Interpretation. John Wiley and Sons, New York.
10. Nag, P. (ed.) (1992): Thematic Cartography and Remote Sensing. Concept Publishing Company, New Delhi.
11. Rampal, K.K. (1999): Handbook of Aerial Photography and Interpretation. Concept Publishing. Company, New Delhi.
12. Campell, J. B. (2003): Introduction to Remote Sensing. 4th edition. Taylor and Francis, London.

Note: In Final Examination Student shall be examined by external and internal examiners.

Marks

Distribution: Written Exam, Viva, Practical File, Map Preparation using open source GIS, Image processing Software Use.

**BA 3rd Year, Sem. VI,
Course III
(Practical)**

Program/Class: Degree/BA	Year: Third	Semester: Sixth
Subject: Geography		
Course Code: A110604R	Course Title: Project Report-2	
Course outcomes: Students will be able to understand <ul style="list-style-type: none"> • In-depth knowledge and application of RS and GIS technology in research. • Learn to prepare Project Report. 		
Credits: 3	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks:40	
Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w		
Unit	Topics	No. of Lectures
I	<p>Project report shall be on any topic of interest of students. It must include Remote sensing and GIS technology directly or indirectly. Like project can be based on investigation of any issue using above technology or these technology must be used in data analysis or representation.</p> <p>Note:</p> <ol style="list-style-type: none"> 1. Each faculty member shall teach and guide to his/her Group of students independently. 2. Student shall choose supervisor according his/her research interest and specialisation of Faculty member. 	30
Suggested Readings:		
This course can be opted as an elective by the students of following subjects: Open for all		
Suggested Continuous Evaluation Methods: Seminar, Presentations, VIVA		
Suggested equivalent online courses		



National Education Policy-2020
Common Minimum Syllabus for all U.P. State Universities/ Colleges
SUBJECT: SOCIOLOGY

Name	Designation	Affiliation
Steering Committee		
Mrs. Monika S. Garg, (I.A.S.), Chairperson Steering Committee	Additional Chief Secretary	Dept. of Higher Education U.P., Lucknow
Prof. Poonam Tandan	Professor, Dept. of Physics	Lucknow University, U.P.
Prof. Hare Krishna	Professor, Dept. of Statistics	CCS University Meerut, U.P.
Dr. Dinesh C. Sharma	Associate Professor	K.M. Govt. Girls P.G. College Badalpur, G.B. Nagar, U.P.
Supervisory Committee - Arts and Humanities Stream		
Prof. Divya Nath	Principal	K.M. Govt. Girls P.G. College Badalpur, G.B. Nagar, U.P.
Prof. Ajay Pratap Singh	Dean, Faculty of Arts	Ram Manohar Lohiya University, Ayodhya
Dr. Nitu Singh	Associate Professor	HNB Govt P.G College Prayagaraj
Dr. Kishor Kumar	Associate Professor	K.M. Govt. Girls P.G. College Badalpur, G.B. Nagar, U.P.
Dr. Shweta Pandey	Assistant Professor	Bundelkhand University, Jhansi

Syllabus Developed By:

S. N.	Name	Designation	Department	College/ University
1	Dr.Anita Misra	Associate Professor	Sociology	Government Post Graduate College,Noida,U.P.
2	Dr.Neeraj Rai	Assistant Professor	Sociology	K.B.S.G.Government Girls Degree College,Dhindhui,Patti,Pratapgarh,U.P.
3.	Dr.Pankaj Kumar Singh	Assistant Professor	Sociology	Maharana Pratap Government Post Graduate College, Bilsa, Badaun.

B.A. in Sociology

PROGRAMME SPECIFIC OUTCOMES (PSOs)-

Program Outcome (After 3 Years of Study)

- a. This course will introduce students to new concepts of Sociology discipline.
- b. These concepts will enhance the conceptual learning and understanding of the basic concepts used in Sociology.
- c. This course will contribute in enriching the vocabulary and scientific temperament of the students.
- d.** The course is designed to incorporate all the key concepts of sociology which would enable the learner to develop keen insights to distinguish between the commonsense knowledge and Sociological knowledge.
- e. This course provides comprehensive understanding of Indian society.

Semester-wise Titles of the Papers in BA (Sociology)

Year	Semester	Course Code	Paper Title	Theory/Practical	Credits
I	I	A070101T	Introduction to Basic Concepts of Sociology	Theory	6
I	II	A070201T	Society in India: Structure, Organization & Change.	Theory	4
I	II	A070202P	Writing skilldevelopment on topics of Contemporary Sociological Importance	Practical	2
II	III	A070301T	Social Change & Social Movements	Theory	6
II	IV	A070401T	Social Problems & Issues of Development in India	Theory	4
II	IV	A070402R	Projects on Sustainable Society	Project	2
III	V	A070501T	Classical Sociological Thought	Theory	5
III	V	A070502T	Research Methodology in Social Sciences	Theory	5
III	V	A070503P	Practical Application of Research Methodology/ Project Work	Practical	3
III	VI	A070601T	Pioneers of Indian Sociology	Theory	5
III	VI	A070602T	Gender and Society	Theory	5
III	VI	A070603R	Field Work/Case Study/Project Work	Project	3

**BA 1st Year, Sem. I ,
Course I
(Theory)**

Programme/Class	Certificate	Year	B.A.I	Semester	I
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Subject	Sociology		
Course Code	A070101T	Course Title	Introduction to Basic Concepts of Sociology
<p>Course Outcomes:</p> <p>This paper will introduce students to new concepts of Sociology discipline. These concepts will enhance the conceptual learning and understanding of the basic concepts used in Sociology. This paper will contribute in enriching the vocabulary and scientific temperament of the students. The course is designed to incorporate all the key concepts of sociology which would enable the learner to develop keen insights to distinguish between the commonsense knowledge and Sociological knowledge.</p>			
Credits - 6	Maximum Marks: 100	Minimum Marks: 33	
Total No. of Lectures –Tutorials – Practical (in hours per week) : 6-0-0			
Unit	Topic	No. of Lectures	
I	Sociology: Meaning, Nature, Scope of Sociology, Sociology and Common Sense, Sociology as a Science, Humanistic Orientation in Sociology. History and Emergence of Sociology in India.	12	
II	Sociology and other Social Sciences (Anthropology, Economics, History, Psychology, Political Science).	12	
III	Basic Concepts: Society, Community, Institutions, Association, Social Group, Human and Animal Society.	11	
IV	Social Institutions: Family, Kinship, Marriage, Education, State & Religion.	11	
V	Culture and Civilization, Pluralism, Multiculturalism, Cultural Relativism	11	
VI	Socio-Cultural Processes: Cooperation, Conflict, Competition, Acculturation, Assimilation and Integration.	11	
VII	Social Structure, Status and Role, Norms, Folkways and Mores, Sanctions and Values.	11	
VIII	Social Stratification: Meaning, Forms and Basis, Social Mobility: Meaning and Types.	11	
This is an elective course open for all.			

Suggested Readings:

1. Berger, P.1963.An Invitation to Sociology: A humanistic Perspective.
2. Bottomore, T.B.1973.Sociology: A guide to Problems and Literature.(Hindiversion available).
3. Davis, Kingsley.1973.Human Society.
4. Giddens.Anthony.2009.Introduction to Sociology.
5. Haralambos M.Sociology: Themes and Perspectives. (Hindi version available).
6. Inkeles, Alex.1987.What is Sociology.
7. MacIver,R.M.and Charles H.Page.1949.Society:An Introductory Analysis.(Hindi version available)
- 8.Mills, C.W.1959.The Sociological Imagination.
9. Thakur, Navendu.2016, Samaj Shastra Ek Parichay.
10. , 2011,, PHI

Suggested Continuous Internal Evaluation Methods (25 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as “SWAYAM” in India and Abroad.

(Theory)

Programme/Class	Certificate	Year	B.A.I	Semester	II
Subject	Sociology				
Course Code	A070201T	Course Title	Society in India: Structure, Organization & Change.		
Course Outcomes: This paper is designed in this manner, so that students are introduced to the concepts related to Indian Society. They are made familiar with the Indian Society, its linkages and continuity with past and present. It also gives insights to analyze contemporary Indian society. This paper provides comprehensive understanding of Indian society.					
Credits - 4	Maximum Marks: 100		Minimum Marks: 33		
Total No. of Lectures –Tutorials – Practical (in hours per week) : 6-0-0					
Unit	Topic				No. of Lectures
I	The structure and composition of Indian society: Village, Town, City, Rural Urban linkages. Unity and diversity in Indian society.				07
II	Indological, Historical, Structural and Functional Perspective to study Indian Society.				07
III	Cultural and Ethnic diversity: Diversities in respect of language, caste, region and religious beliefs and practices.				08
IV	Tribal Communities in India: Geographical distribution, Problem of Assimilation, Integration and Assertion, Backwardness and Underdevelopment in Tribe.				08
V	Basic Institutions of Indian society: Caste, Marriage, Religion, Class and Joint Family.				06
VI	Social Classes in India: Agrarian-Rural, Industrial-Urban: The Middle Class; Exclusion and Inclusion, Backward classes, Dalits, Women.				08
VII	Population: Structure and dynamics, Demographic analysis, Population explosion, Demographic theories, Population growth and control.				08
VIII	Change and Transformation in Indian Society; Factors affecting National Integration: Casteism and Politics of caste in India, Communalism and Politics of communalism, Naxalism.				08
This is an elective course open for all.					

Suggested Readings:

1. Bose, N.K. 1967: Culture and Society in India
2. Dube, S.C., 1958: India's Changing Villages.
3. Karve, Irawati, 1961: Hindu Society: An Interpretation.
4. Srinivas, M.N., 1963: Social Change in Modern India.
5. [unclear], 2000, [unclear] [unclear], [unclear] [unclear] [unclear] [unclear]

Suggested Continuous Internal Evaluation Methods (25 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

BA 1st Year, Sem. II
Course II
(Practical)

Programme/Class	Certificate	Year	B.A.I	Semester	II
Subject	Sociology				
Course Code	A070202P	Course Title	Writing skill development on topics of Contemporary Sociological Importance		
<p>Course Outcomes: This is the practical paper introduced in the second semester of the certificate course in order to develop writing skills among the students of Sociology. This would enhance and inculcate the analytical skills among the students. The paper is designed to enrich the conceptual vocabulary of the students, such that they are equipped with the writing style in Sociology. This paper is presumably beneficial for the students who are interested in the field of Media, Journalism, Essay writer, Column writer, Psephology, Journalism.</p>					
Credits - 2	Maximum Marks: 100		Minimum Marks: 33		
Total No. of Lectures –Tutorials – Practical (in hours per week) : 2-0-0					
Unit	Topic			No. of Lectures	
I	The structure and composition of Indian society: Village, Town, City, Rural Urban linkages. Unity and diversity in Indian society.			08	
II	Indological, Historical, Structural and Functional Perspective to study Indian Society.			08	
III	Cultural and Ethnic diversity: Diversities in respect of language, caste, region and religious beliefs and practices.			07	

IV	Tribal Communities in India: Geographical distribution, Problem of Assimilation, Integration and Assertion, Backwardness and Underdevelopment in Tribe.	07
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This is an elective course open for all.

Suggested Readings: 1.J, Jennifer. Quinn.S. Brown.R, 2011: Writing for Sociology, University of California, Berkeley.
 2. Uberoi, Patricia, 1993: Family, Kinship and Marriage in India.
 3. <https://www.citethisforme.com/guides/harvard/how-to-cite-a-book>
 4. <https://libguides.ru.nl/apaEN/reference-examples-books-and-reports>
 5. Collected Essays. By M. N. Srinivas with a foreword by, A. M. Shah. Delhi: Oxford University Press, 02.
 6.

Suggested Continuous Evaluation Methods:

- Practical file evaluation. main focus on presentation, content and proper use of research methodology & Viva.

Suggested equivalent online courses:
 IGNOU & Other centrally/state operated Universities / MOOC platforms such as “SWAYAM” in India and Abroad.

**BA 2ndYear, Sem. III ,
 Course I
 (Theory)**

Programme/Class	Diploma	Year	B.A.II	Semester	III
Subject	Sociology				
Course Code	A070301T	Course Title	Social Change and Social Movement in India		
Course Outcomes: This paper is designed in amanner, so that students are introduced to the concepts related to Social change and Social Movement. This course will introduce students to the dynamic aspect and dissension tendencies of society. The critical evaluation would enable students to come out with better suggestions, contributing in cohesion of society.					
Credits - 6	Maximum Marks: 100		Minimum Marks: 33		
Total No. of Lectures –Tutorials – Practical (in hours per week) : 6-0-0					
Unit	Topic				No. of Lectures
I	Concept, Meaning & Nature of Social change, Factors of Social Change, Change in structure and Change of structure				12
II	Types of Social change: Evolution, Development, Progress and Revolution.				12

III	Theories of Social Change: Linear, Cyclical, Demographic, and Economic (Conflict). Information technology and Social Change.	11
IV	Processes of Social Change in India: Sanskritization, Westernization, Modernization. Concept & Impact of Secularization and Globalization. Parochialisation and Universalization	11
V	Concept & Meaning of Social Movement, Nature, Definitions and Characteristics of Social Movements.	11
VI	Social Movement and Social Change: Theories of Social Movement: Structural –functional , Marxist, Resource Mobilization Theory ,	11
VII	New Social Movement Types of Social Movement: Reform, Rebellion, Revival, Revolution, Insurrection, Counter Movement	11
VIII	Social Change in India through Social Movements: Peasant movement, Labour movement , Dalit movement , Women’s movement , Environmental movement	11

This is an elective course open for all.

Suggested

Social change : W F Ogburn

Theories of social change: A critical appraisal - Raymond Boudon

The theory of social change - John McLeish

Social change in India : Crisis and resilience - Yogendra Singh

Social movement and Social Transformation - MSA Rao

Protest and change : Studies in social movement - T K Oommen

Social movements in India - Ghanshyam Shah

आधुनिक भारत में सामाजिक परिवर्तन: डॉ. विवेकानंद

भारत में सामाजिक आंदोलन

: वी. ए. नसह, विविमेयनसह

आधुनिक भारत में सामाजिक परिवर्तन: एम

एश्वरीनवास

Suggested Continuous Internal Evaluation Methods (25 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as “SWAYAM” in India and Abroad.

**BA 2nd Year, Sem. IV ,
Course I
(Theory)**

Programme /Class	Diploma	Year	B.A II	Semester	IV
Subject	Sociology				
Course code	A070401T	Course Title	Social Problems & Issues of Development in India		
<p>Course Outcomes: The syllabus is designed to introduce students to the emerging social problems, the concept and issues of development in Indian Society. The course intends to focus upon the deviant and delinquent behaviour, issue of corruption and other disorganizational and structural problems of Indian Society. The endeavour of the course is to make learners aware about the social problems and developmental issues in the Indian Society.</p>					
Credits:4	Max. Marks:100			Min. Passing Marks:33	
Total no. of lectures-tutorials-practical (in hours per week):4-0-0					
Unit	TOPIC			NO. OF LECTURES	
I	Deviance: Concept & Meaning, Definition. Crime and ,Juvenile Delinquency White Collar crime,			07	
II	Corruption in Public life, Cyber Crime, Drug Addiction, Suicide, Terrorism.			07	
III	Structural Problems: Poverty, Caste Inequality, Problems: Religious, Ethnic and Regional, Minorities, Backward Classes and Dalits.			08	
IV	Familial Problems: Dowry, Domestic Violence, Divorce, Intra and Inter Generational Conflict, Problem of Elderly.			08	
V	Concept of Development, Economic Vs Social Development, Human Development.			06	
VI	Theories of Development: Smelser, Lerner, Rostow. Under Development Dependency: Centre Periphery (Frank), Uneven Development (Samir Amin); Globalization and Development Society.			08	
VII	Issues of Development: Agrarian Crisis, Human Resource Development & Skilled Unemployment.			08	
VIII	Ecology and Development: Development and Displacement, Rehabilitation and Resettlement Policy, Sustainable development, Global Warming and Climate Change.			08	
This is elective course open for all.					

Suggested readings:

1. Cloward, R., 1960. Delinquency and Opportunity.
2. Charles, L.C., Michael, W.F., 2000. Crime and Deviance: Essays and Innovations of Edwin M Lemert.
3. Cohen, Albert .K. 1955, Delinquent Boys: The Culture of the gang.
4. H, Travis, 1969, Causes of Delinquency.
5. E, Sutherland, D, Cressey, D.F., Luckenbill, 1934. Principles of Sociology.
6. Betellie, Andre, 1974: Social Inequality.
7. Gill, S.S., 1998: The Pathology of Corruption.
8. Lewis, Oscar, 1966: Culture of Poverty, Scientific American, Vol. II & V
9. Gadgil, Madhav and Guha, Ramchandra, 1996: Ecology and Equity: The Use and Abuse of Nature in Contemporary India.
10. Berreman, G.D., 1979: Caste and Other Inequalities: Essays in Inequality.
11. Browning Halcli, Webster(ed), 1996: Understanding Contemporary Society: Theories of the Present.
12. Desai A.R, 1971: Essays on Modernization of Underdeveloped Societies.
13. Datt and Sundaram, 2008. Indian Economy
14. Eade D and Ligteringen E, Debating Development, 2006. – NGOs and the Future
15. EPW Research Foundation, Social Indicators of Development for India, Economic and Political Weekly, May 14-1994.
16. Escobar Arturo, 1995: Encountering Development, the Making and Unmaking of the Third World
17. Ghosh J, Never Done and Poorly Paid: Women's Work in Globalizing India. 18.

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Suggested Continuous Internal Evaluation Methods (25 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as “SWAYAM” in India and Abroad.

**BA 2nd Year, Sem. IV ,
Course II
(Project)**

Programme /Class	Diploma	Year	B.A II	Semester	IV
Subject	Sociology				
Course code	A070401R	Course	Project on Sustainable Society		

Course Outcomes: The syllabus designed to introduce students to the emerging social problems and the concept and issues of development in Indian Society. The project work will engage students directly in practical knowledge about the conducting research project. This project work will help learners to know about the issue of sustainability and

policies & programmes.

Credits:2

Max. Marks:100

Min. Passing Marks:33

Total no. of lectures-tutorials-practical (in hours per week):2-0-0

Unit

Topic

No. Of Lectures

I

Research Project: Definition & Concept, Selection of Research Topic related to Social Problems and Social Development, **Sustainable Development.**

07

II

How to develop Research Proposal and its Implementation.

07

III

Methods & Techniques for conducting scientific study. Writing of Bibliography.

08

IV

Research Project final draft and writing of findings, Presentation of Research Project.

08

This is elective course open for all.

Suggested readings:1. Goode and Hatt, 2006: Methods in Social Research.

2. Young Pauline, 1988 Scientific Social Surveys and Research Practice.

3. Silverman David, 1985 Gower, Vermont Qualitative Methodology and sociology.

4. Sachdev Meetal, 1987: Qualitative Research in Social Sciences.

5. <https://www.westminster.ac.uk/study/postgraduate/research-degrees/entry-requirements/how-to-write-your-research-proposal>

Suggested Continuous Evaluation Methods:

- Project file evaluation, main focus on presentation, content and proper use of research methodology, Viva.

BA 3rd Year, Sem. V ,

**Course I
(Theory)**

Programme /Class	Degree	Year	B.A III	Semester	V
Subject		Sociology			
Course code	A070501T	Course	Classical Sociological Thought		
<p>Course Outcomes: The course syllabus is designed to help students to know about the classical contributions of Pioneers of Sociology. The paper will focus upon the history of Sociology and the intellectual traditions originated during the crisis in Europe and the impact it had on the structures of society. The learner will gain theoretical as well as methodological knowledge about the subject.</p>					
Credits:5		Max. Marks:100		Min. Passing Marks:33	
Total no. of lectures-tutorials-practical (in hours per week):4-0-0					
Unit	Topic				No.of Lectures
I	Emergence of Sociology, Intellectual Sources: Enlightenment, Philosophy of History, Political History, Social and Political Reform Movements. Revolution: French Revolution and Industrial Revolution.				10
II	.August Comte: Positivism, The Hierarchy of Sciences, Law of Three Stages. Herbert Spencer: Social Evolution and Social Darwinism				10
III	Emile Durkheim: Social Fact, Mechanical Solidarity and Organic Solidarity, Suicide.				10
IV	Vilfredo Pareto: Action – Logical and Non Logical Action, Residues and Derivatives.				09
V	Karl Marx: Dialectical Historical Materialism, Class Struggle, Theory of Alienation.				09
VI	Max Weber: Social Action, Power and Authority, Protestant Ethics and Spirit of Capitalism.				09
VII	G.H.Mead: Symbolic Interaction, Concept of ‘Self’ and ‘Me.’.				09

VIII	Talcott Parsons: Action and Behaviour; Social System, Pattern Variables. R.K.Merton: Middle Range Theory, Manifest and Latent Function.	09
This is elective course open for all		
<p>Suggested Readings :</p> <ol style="list-style-type: none"> 1. Giddens Anthony, 1989 : Sociology, Polity Press, Cambridge 2. Kalberg Stephen, 2002: The Protestant Ethic and Spirit of Capitalism, III rd edition. 3. Kamernka Eugene, 1983: The Portable Marx, Penguin. 4. Kalberg Stephen, 1994: Connecting Issues in Comparative Historical Studies Today 5. Lukes Steven, Durkheim: Life and Works: A Critical Study, 1973. 6. Morrison Ken, Marx, Durkheim, Weber – formation of Modern Social Thought, Sage Publication, New Delhi, 1995. 7. Ritzer George, Sociological Theory, McGraw Hill, New York, 2000. 8. Tucker K.N, 2002. Classical Social Theory. 9. Wilhelm Outhwaite and Mulkey M, Social Theory & Social Criticism 10. [unreadable] 		
<p>Suggested Continuous Internal Evaluation Methods (25 Marks):</p> <ul style="list-style-type: none"> • Seminar/Assignment on any topic of the above syllabus. • Test with multiple choice questions / short and long answer questions. • Research Orientation of the student. • Quiz 		
<p>Suggested equivalent online courses: IGNOU & Other centrally/state operated Universities / MOOC platforms such as “SWAYAM” in India and Abroad.</p>		

**BA 3rd Year, Sem. V ,
Course II
(Theory)**

Programme /Class	Degree	Year	B.A III	Semester	V
Subject			Sociology		
Course code	A070502T	Course	Research Methodology in Social Sciences		
<p>Course Outcomes: The course of Research Methodology in Social Sciences/Sociology is structured in a way that it makes student to understand and comprehend the research problems, research techniques and nevertheless course intends to develop objective as well as subjective enquiry into the areas of Sociological studies. The main purpose of the course is to develop scientific and humanistic approach towards the research work in the subject.</p>					
Credits:5		Max. Marks:100		Min. Passing Marks:33	
Total no. of lectures-tutorials-practical (in hours per week):4-0-0					
Unit	TOPIC			No. of Lectures	
I	Social Research: Concept, Nature & Types of Social Research, Importance of Social Research.Steps of Scientific Research: Formulation of Research Problem.			10	
II	Research Design: Meaning, Types and Importance.Hypothesis: Its Types and Sources.			10	
III	Problems of Objectivity. Objectivity Versus Subjectivity, Value Neutrality. Ethical Issues in Social Research. Plagiarism and Copy Right.			10	
IV	Types of Research: Basic and applied: Historical and Comparative; Descriptive, Exploratory, Explanatory and Diagnostic.			09	
V	Data Collection: Primary and Secondary Source; Census: Observation; Case Study; Content Analysis.			09	
VI	Techniques of Data Collection; Sampling, Questionnaire, Schedule and Interview, Primary and Secondary Data.			09	

VII	Classification and Presentation of Data: Coding; Tables; Graphs; Diagrams; Bar; Chart, Pictorial and Histogram and Report Writing.	09
VIII	Overview of Statistics in Sociology, Measures of Central Tendency (Simple Arithmetic Mean, Median and Mode).	09

This is elective course open for all

- Suggested readings:
1. Babbie Earl, 2004: The Practice of Social Research, (10th ed.)
 2. Burawoy M and Joseph Blum (ed), 2000: Global Ethnography: Forces, Connections and Imaginations
 3. Bryman Alan, 2001 Social Research Methods.
 4. Carol Grbich, 2000: New Approaches in Social Research, Sage Publication.
 5. Devine and Heath, 1999: Sociological Research Methods in Context, Palgrave.
 6. Denzin Norman, Lincoln Yvonna (ed), 2006.: Handbook of Qualitative Research,
 7. Goode and Hatt, Methods in Social Research
 8. Giddens Anthony, 1976: New Rules of Sociological Research.
 9. Mulkey Michael, 1979: Science and the Sociology of Knowledge, George Allen and Unwin Ltd.
 10. Silverman David, 1985: Qualitative Methodology and sociology, Gower, Vermont.
 11. Sachdev Meetali, 1987: Qualitative Research in Social Sciences, Raj Publishing, Jaipur.
 12. Williams Malcolm, 2004. Science and Social Science, Routledge, New York,
 13. Young Pauline, Scientific Social Surveys and Research Practice,
 14. जे.पी.स हिं : ाम ाजकअनु धिं ानकीविधयॉ

Suggested Continuous Internal Evaluation Methods (25 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as “SWAYAM” in India and Abroad.

**BA 3rd Year, Sem. V ,
Course III
(Practical)**

Programme /Class	Degree	Year	B.A III	Semester	V
Subject			Sociology		
Course code	A070503P	Course	Practical Application of Research Methodology/Project Work		
Course Outcomes: Research Methodologies comprise important part in the course structure of Sociology, hence the course is designed in such a way that student will learn the basic and useful techniques of research which will be beneficial in exploring the research questions and formulation of Research Design. The student will learn how to construct schedules, questionnaire and applicability of other research methods.					
Credits:3		Max. Marks:100		Min. Passing Marks:33	
Total no. of lectures-tutorials-practical (in hours per week):2-0-0					
Unit	Topic				No. Of Lectures
I	Social Research: Meaning and Definition. Basic Steps in Social Research.				12
II	Formulation of Hypothesis and Selection of Research Problem.				11
III	Use of techniques of data collection. Construction of Interview Schedule, Questionnaire, Case study method, Observation method.				11
IV	Classification and Presentation of data: Use of coding method, Classification, Preparation of tables, Graphs, Bar and Pie diagram.				11
This is elective course open for all					
Suggested Readings: 1 Bagchi, Kanak, k, 2000: Research Methodology in Social Sciences: A Practical Guide. 2 Daniel, Stockemer, 2019: Quantitative Methods for the Social Sciences 3 Kara, Helen: Creative Research Methods in the Social Sciences: A Practical Guide. 4 ,					
Suggested Continuous Evaluation Methods: <ul style="list-style-type: none"> Practical/Project file evaluation, main focus on presentation, content and proper use of research methodology, Viva. 					
Suggested equivalent online courses: IGNOU & Other centrally/state operated Universities / MOOC platforms such as “SWAYAM” in India and Abroad.					

**BA 3rd Year, Sem. VI ,
Course I
(Theory)**

Programme /Class	Degree	Year	B.A III	Semester	VI
Subject			Sociology		
Course code	A070601T	Course	Pioneers of Indian Sociology		
<p>Course Outcomes: The course outline has been delineated in a manner that the student of Sociology is able to gather knowledge about the esteemed Indian Pioneers of Sociology, who largely used indigenous methodology to understand the Indian society and its complexities. The learner will be able to grasp information and knowledge about the approaches and theoretical framework adopted by the Indian Sociologists and simultaneously they will know about the History of Sociology in India and Sociological traditions.</p>					
Credits:5		Max. Marks:100		Min. Passing Marks:33	
Total no. of lectures-tutorials-practical (in hours per week):4-0-0					
Unit	Topic			No. of Lectures	
I	G. S. Ghurye: Caste; Indian Sadhus; Rururban Community; D. N. Majumdar: Caste; Tribal Integration			10	
II	Radhakamal Mukherjee: Social Structure of Values; Social Ecology			10	
III	D.P. Mukherjee: Indian Culture and Diversities; Modernity, Indian Youth, Marxology			10	
IV	Irawati Karve: Kinship in India I.P. Desai: Indian Family			09	
V	M.N. Srinivas: Sanskritization; Westernization; Secularization; Dominant Caste.			09	
VI	S. C. Dube: Indian Village; Tradition; Modernization and Development.			09	
VII	A.R. Desai: Social Background of Indian Nationalism; Marxist Approach to Study Indian Society. Rama Krishna Mukherjee: Dynamics of Agrarian Class Structure.			09	
VIII	Andre Beteille: Caste, Class and Power: Agrarian Structure			09	

This is elective course open for all.

Suggested readings: D.N. Dhanagare, 1999: Themes and Perspectives in Indian Sociology.
 Das Veena, 1995: Critical Events, An Anthropological Perspective on Contemporary India.
 David Ludden, 2000: Critique of Subaltern Studies.
 Dube, S. C, 1990. Indian Society.
 Gail Omvedt, 2002 Dalits and Democratic Revolution.
 Vivek P. S, 2002. Sociological Perspectives and Indian Sociology
 T.S.Pawale & S.D.Patil, Basic Sociological Concepts
 Ghurye, G. S. 2000 1932. Caste and Race in India.
 Pramanik. S. K. 2001. Sociology of G S Ghurye.
 Majumdar. D. N 1944 The Fortunes of Primitive Tribes.
 Saksena. H. S. 2017. Tribal Studies and Beyond: Contributions of D.N. Majumdar to Indian Anthropology
 Madan, T.N.2011. Sociological Traditions: Methods and Perspectives in the Sociology of India
 Madan, T.N.2013. Sociology at the University of Lucknow: The First Half Century (1921-75
 Oommen, T.K. 2015- Radhakamal Mukherjee on Social Ecology: Filling Up Some Blanks, Sociological Bulletin, Vol. 64, No. 1 (January – April 2015), pp. 15-35.
 Mukherjee, D.P. 2002. Indian Culture.
 Mukherjee, D.P. 2002. Diversities: Essays In Economics, Sociology and Other Social Problems.
 Desai I.P. 1964: Some aspects of family in Mahuva.
 Karve, Irawati, 1953 Kinship Organisation in India. (Deccan College Monograph Series, 11.)
 Uberoi, Patricia, Nandini Sundar and S. Deshpande. 2007. Anthropology in the East: Founders of Indian Sociology and Anthropology.

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- Suggested Continuous Internal Evaluation Methods (25 Marks):
- Seminar/Assignment on any topic of the above syllabus.
 - Test with multiple choice questions / short and long answer questions.
 - Research Orientation of the student.
 - Quiz

Suggested equivalent online courses:
 IGNOU & Other centrally/state operated Universities / MOOC platforms such as “SWAYAM” in India and Abroad.

**BA 3rd Year, Sem. VI ,
 Course II
 (Theory)**

Programme /Class	Degree	Year	B.A III	Semester	VI
Subject		Sociology			
Course code	A070602T	Course	Gender and Society		

Course Outcomes: This course is gender sensitive and is directed towards engaging students to learn and rethink about the gender issues. The course will introduce students to the core gender issue and will equip them to come with suggestions which would be directed towards gender equity.		
Credits:5	Max. Marks:100	Min. Passing Marks:33
Total no. of lectures-tutorials-practical (in hours per week):4-0-0		
Unit	Topic	No. of. Lectures
I	Gender (Culture) vs. Sex (Biology), Equality vs. Difference, Gender Roles, Social Construction of Gender, Gender and Sexuality.	10
II	Women in Family, Socialization and Gender, Feminist Movement Understanding Gender Inequalities- Caste and Class.	10
III	Gender Perspective: Liberal, Marxian, Socialist, Radical	10
IV	Patriarchy and Gender, Sexual Division of Labour, Masculinity vs. Femininity.	09
V	Women and Society in India: Demographic Profile, Population and Gender, Population, Gender and Migration.	09
VI	Women in Economy (Work and Property Rights), Women and Power & Subordination, Women and Education, Women and Health	09
VII	Crime against Women: Infanticide, Domestic Violence, Honour Killing, Harassment at work place.	09
VIII	Constitutional Safeguards and Provisions regarding Women. Programmes and Policies regarding upliftment of Women. Personal laws, law as tool of emancipation of women. Women Rights as Human Rights, Gender and Human Rights.	09
This is elective course open for all.		
Suggested readings: Bhasin Kamala, 2000 Understanding Gender, Kali for Women. Basu Aparna, 1999 Women's Education in India in Ray and Basu (edt): From Independence Towards Freedom. Chodhuri Maitreyee, 2004 Feminism in India, Women Unlimited. Chakravarty Uma, 2003. Gendering caste through a feminist Lense, Stree, Calcutta, Courting Disaster, PUDR Report, 2003. Davis Kathy, Evans Mary, Lorber, J (edt), 2006: Handbook of Gender and Women's Studies. Delmont Sara, 2003: Feminist Sociology. Feminist Concepts, Contribution to Women's Studies Series, Part-I, II, III, RCWS, Mumbai Geetha V, 2007 Patriarchy, Stree, Calcutta.		

Geetha V, 2002 Gender, Stree, Calcutta.
 Kimmel Michael, The Gendered Society, Oxford, NY, 2008.
 Radha Kumar, History of Doing, Kali for Women, New Delhi, 1992

2017, 2018, 2019, 2020, 2021, 2022

2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100

Suggested Continuous Internal Evaluation Methods (25 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as “SWAYAM” in India and Abroad.

**BA 3rd Year, Sem. VI ,
 Course III
 (Project)**

Programme /Class	Degree	Year	B.A III	Semester	VI
Subject		Sociology			
Course code	A070603R	Course	Field Work/Case Study/ Project Work		
Course Outcomes: The syllabus is designed to introduce students to get themselves engaged in the field work and project work so that they are equipped with the practical knowledge about the field work and research project. This will be an empirical learning for those who aspire to become future Social Scientists.					
Credits:3		Max. Marks:100		Min. Passing Marks:33	
Total no. of lectures-tutorials-practical (in hours per week):2-0-0					
Unit	Topic			No. Of.Lectures	
I	Knowing about field work, Selection of research problem for Research project and field work. Concept of Universe and Units.			12	
II	Research Design, Use of Census and Sampling method to select units of study.			11	
III	Estimation of resources: Time, money, human resource. Conducting field survey, Necessary gadgets and equipments.			11	
IV	Classification and Tabulation of data, Presentation of data. Report writing.			11	
This is elective course open for all.					

Suggested readings: Czarniawska, Barbara. 2014: Social Science Research: From Field to Desk.
Perecman, Ellen, Curran, Sara, R., 2006: A Handbook For Social Science Field Research.
Wadds,P.,Apoifis,N.,Schmeidl,S,Spurway,K.,2020: Navigating Field Work in the Social
Sciences: Stories of Danger, Risk and Reward.

त्रिपाठी तन्दरशिश्रीास्तिएके.: ामणजकअनु िंधानएिंिं ािंययकी,
राितपजलिके शिं ,जयपुर

Suggested Continuous Evaluation Methods:

- Project file evaluation,main focus on presentation,content and proper use of research methodology,Viva.

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as “SWAYAM” in India and Abroad.



National Education Policy-2020
Common Minimum Syllabus for all U.P. State Universities/ Colleges
SUBJECT: ECONOMICS

Name	Designation	Affiliation
Steering Committee		
Mrs. Monika S. Garg, (I.A.S.), Chairperson Steering Committee	Additional Chief Secretary	Dept. of Higher Education U.P., Lucknow
Prof. Poonam Tandan	Professor, Dept. of Physics	Lucknow University, U.P.
Prof. Hare Krishna	Professor, Dept. of Statistics	CCS University Meerut, U.P.
Dr. Dinesh C. Sharma	Associate Professor	K.M. Govt. Girls P.G. College Badalpur, G.B. Nagar, U.P.
Supervisory Committee - Arts and Humanities Stream		
Prof. Divya Nath	Principal	K.M. Govt. Girls P.G. College Badalpur, G.B. Nagar, U.P.
Prof. Ajay Pratap Singh	Dean, Faculty of Arts	Ram Manohar Lohiya University, Ayodhya
Dr. Nitu Singh	Associate Professor	HNB Govt P.G College Prayagaraj
Dr. Kishor Kumar	Associate Professor	K.M. Govt. Girls P.G. College Badalpur, G.B. Nagar, U.P.
Dr. Shweta Pandey	Assistant Professor	Bundelkhand University, Jhansi

Syllabus is developed by:

S. N.	Name	Designation	Department	College/University
1.	Dr. Vinod Kumar Srivastava	Professor, Convener of the Team	Department of Economics and Rural Development	Dr. Ram Manohar Lohia Avadh University, Ayodhya (U P)
2.	Dr. Dinesh Kumar	Professor, Member	Department of Economics	CCS University Meerut (U P)
3.	Dr. Rashi Krishna Sinha	Associate Professor, Secretary	Department of Economics	Dr. Shakuntala Misra National Rehabilitation University, Lucknow (U P)

B.A. in Economics

The Course is designed for the students pursuing graduation with Economics in regular mode. The programme aims to inculcate economic thinking among the students in economic decision making by comprehending economic theory. It aims to develop analytical view point in the students about the economic behaviour of people. The objective is to nurture among student a view point of a socially responsible and ethical aware citizen. The under graduate programme will have 10 courses in 6 Semesters in 3 years. In the Fifth and the Sixth Semester 01 paper is given as optional. In the Fifth Semester it is proposed to have Dissertation/Project keeping in the spirit of the New Education Policy 2020 to introduce research at the graduation level. The structure of syllabus is based on the template of UGC proposed for the CBCS for undergraduates in Economic (Regular).

Programme Specific Outcomes(PSOs)- Student after completing graduation will be able to learn-

PSO 1:	The behavioural patterns of different economic agents, advance theoretical issues and their applications.
PSO 2:	Understand the basic concept of microeconomics.
PSO 3:	Understanding basic concepts of Macroeconomics.
PSO 4:	Acquaint with some basic statistical methods to be applied in economics.
PSO 5:	Acquaint with some basic mathematical methods to be applied in economics.
PSO 6:	Acquaint with some basic theoretical concept of public finance.
PSO 7:	Acquaint with the measurement of development with the help of theories along with the conceptual issues of poverty and inequalities with Indian perspectives.
PSO 8:	Delineate the fiscal policies designed for developed and developing economics.
PSO 9:	Facilitate the historical developments in the economic thoughts propounded by different schools. To familiarise students with the contribution of Indian Economic Thinkers and the relevance of their contribution.
PSO 10:	Learn the basic concept of monetary analysis and financial marketing in Indian financial markets.
PSO 11:	Learn the development issues of Indian economy.
PSO 12:	Acquaint with some basic concept of environmental economics along with the solution of the environmental problems.
PSO 13:	Learn the real and monetary sides of International economics.
PSO 14:	Familiarise and acquaint with the characteristics of the economy of Uttar Pradesh.
PSO 15:	To familiarize the students about issues of ethics in economic thinking and practice.

List of all Papers in all Six semesters.

Semester-wise Titles of the Papers in BA(Economics)

Year	Sem.	Course Code	Paper Title	Theory/Practical	Credits
1	I	A080101T	Principle of Micro Economics	Theory	6
1	II	A080201T	Principles of Macro Economics	Theory	6
2	III	A080301T	History of Economic Thought	Theory	6
2	IV	A080401T	Money, Banking and Public Finance	Theory	6
3	V	A080501T	Economic Growth and Development	Theory	5
3	V	A080502T/ A080503T	Optional Paper(Any 1) Environmental Economics Or International Economics	Theory	5
3	V	A080504R	Elementary Statistics based Project	Practical	3
3	VI	A080601T	Indian Economy & Economy of Uttar Pradesh	Theory	5
3	VI	A080602T/ A080603T	Optional Paper(Any 1) Agriculture Economics Or Elementary Mathematics	Theory	5
3	VI	A080604R	Dissertation/Project On the Local Issues with Economic Focus plus Presentation on Ppt of the Dissertation	Project	3

BA 1st Year, Sem. I , Course I (Theory)

Programme/Class: Degree/ BA	Year: First	Semester: First
Subject: Economics		
Course Code: A080101T	Course Title: Principle of Micro Economics	
<p>Course Outcome:</p> <ul style="list-style-type: none"> ● The students are familiarized with basic concepts of microeconomics such as laws of demand and supply and elasticity etc so that he/she can comprehend them & familiarize with day today happenings. ● The students learn and understand the concepts of consumer behaviour like cardinal utility and ordinal utility analysis. ● The students learn and understand application of Indifference curve analysis in deriving demand curves, price effect, income effect and substitution effect. ● The students learn and understand the Theory of production- iso-quants, laws of returns to scale, law of variable proportion. ● The students learn, understand and compare between the Traditional and modern theory of cost. ● Demonstrate an understanding, usage and application of basic economic principles. ● Describe and apply the methods for analyzing consumer behavior through demand and supply, elasticity and marginal utility. ● To analyze the behavioral patterns of different economic agents regarding profit, price, cost etc. ● The decision-making process in different market situations such as perfect competition, monopolistic competition, monopoly and oligopoly markets. ● To deal with the advance theoretical issues and their practical applications of distribution theories. ● General equilibrium, economic efficiency and market failure. 		

Credits: 6		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks: 40
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
Part I		
I	Introduction: Problem of scarcity and choice: scarcity, choice and opportunity cost; production possibility frontier; economic systems. Demand and supply: law of demand, determinants of demand, shifts of demand versus movements along a demand curve, market demand, law of supply, determinants of supply, shifts of supply versus movements along a supply curve, market supply, market equilibrium. Applications of demand and supply: price rationing, price floors, consumer surplus, producer surplus. Elasticity: price elasticity of demand, calculating elasticity, determinants of price elasticity, other elasticities.	12
II	Consumer Theory: Budget constraint, concept of utility, diminishing marginal utility, Diamond-water paradox, income and substitution effects; consumer choice: indifference curves, derivation of demand curve from indifference curve and budget constraint. Theory of Revealed Preference	12
III	Production and Costs: a. Production: behaviour of profit maximizing firms, production process, production functions, law of variable proportions, choice of technology, isoquant and isocost lines, cost minimizing equilibrium condition. b. Costs: costs in the short run, costs in the long run, revenue and profit maximizations, minimizing losses, short run industry supply curve, economies and diseconomies of scale, long run adjustments.	11
IV	Market Structures a. Perfect Competition: a. Assumptions: theory of a firm under perfect competition, demand and revenue; equilibrium of the firm in the short run and long run; long run industry supply curve: increasing, decreasing and constant cost industries. Welfare: allocative efficiency under perfect competition. b. Imperfect Competition Monopolistic competition: Assumptions, SR& LR price and output determinations under monopolistic competition, economic efficiency and resource allocation; oligopoly: assumptions, oligopoly models, game theory, contestable markets, role of government.	11
Part II		
V	Theory of a Monopoly Firm Concept of imperfect competition; short run and long run price and output decisions of a monopoly firm; concept of a supply curve under monopoly; comparison of perfect competition and monopoly, social cost of monopoly, price discrimination; remedies for monopoly: Antitrust laws, natural monopoly.	11
VI	Consumer and Producer Theory a. Consumer and Producer Theory in Action Externalities, marginal cost pricing, internalising externalities, public goods; imperfect information: adverse selection, moral hazard, social choice, government inefficiency. b. Markets and Market Failure Market adjustment to changes in demand, efficiency of perfect competition; sources of market failure: imperfect markets, public goods, externalities, imperfect information; evaluating the market mechanism.	11
VII	Income Distribution and Factor pricing Input markets: demand for inputs; labour markets, land markets, profit maximisation condition in input markets, input demand curves, distribution of Income.	11

VIII	Welfare Economics: Concept & Definition of Welfare Economics. Normative & Positive Economics. Concepts of Social Welfare. Role of Value Judgment in Welfare Economics, Individual & Social Welfare. Pareto Optimality, Conditions of Pareto Optimality. New Welfare Economics: Kaldor-Hicks Welfare Criterion. Scitovsky Paradox & Scitovsky's Double Criterion. Grand Utility Possibility Frontier. Social Welfare Function. Theories of Social Choice.	11
Suggested Readings:		
<ol style="list-style-type: none"> 1. Ahuja ,H.L.(2013) : Advanced Economic Theory”, S.Chand & Company. Shastri,Rahul.A (1999) : Microeconomics”, Orient Blackswan. 2. Ahuja,H.L (2012) :Ucchatar Arthik Siddhant”, S.Chand & Company, New Delhi. 3. Dwivedi,D.N (2011) :Microeconomics-Theory & Applications”, Pearson. 4. Lal, S.N (2013):Arthshastra Ke Siddhant”, Shiva Publishing House, Allahabad. Seth,M.L (2012) : Arthshastra Ke Siddhant”,Laxmi Narayan Publications,Agra 5. Lipsey,Richard&Chrystal,Alec (2011) : Economics”, Oxford University Press Publications, New Delhi. 6. Pindyck,Robert.S., Rubinfeld.Daniel.L., Mehta.Prem.L(2009): Microeconomics”, Pear son. 7. Salvatore, Dominic(2010) : Principles of Microeconomics”, Oxford University Press Publications, New Delhi. 8. Samuelson,Paul.A& Nordhaus, William.D(2010): Economics”, Tata McGraw Hill. Koutsoyiannis, A (2008) (2nded): Modern Microeconomics”, Macmillan. 9. Stonier,A.W&Hague.Douglas.C (2003)(5thed) : A Text Book of Economic Theory”, Pearson. 		
Suggested Continuous Evaluation Methods:		
Assignment / Test / Quiz(MCQ) / Seminar/ Presentations/ Research orientation of students.		
Suggested equivalent online :		
Swayam		
Coursera		

**BA 1stYear, Sem. II,
Course I
(Theory)**

Program/Class: Degree/BA	Year: First	Semester: Second
Subject: Economics		
Course Code: A080201T	Course Title: Macro Economics	
Course Learning Outcomes		
<ul style="list-style-type: none"> ● Students are able to explain national income, comprehend calculation methods of national income, and concepts related to national income. ● Students are able to comprehend classical theory of employment and the Keynesian approach. ● Students are able to comprehend the concept of multiplier and it's working. ● Students are able to understand the relationship between inflation and employment. ● Students are able to relate factors determining national income such as consumption, saving and investment. ● Students are able to analyze different phases of trade cycle, demonstrate various trade cycle theories, understand the impact of cyclical fluctuation on the growth of business, and lay policies to control trade cycle. 		
Credits: 6		Core Compulsory
Max. Marks: -25+75		Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
I	Introduction: What is macroeconomics? Macroeconomic issues in an economy. Macro vs. Micro Economics, Limitations of Macroeconomics; Introduction to National Income. Concepts of GDP,	12

II	National Income Accounting: Concepts of GDP GNP, NDP and NNP at market price and factor cost; Personal Income and Disposable Personal Income. Measurement of National Income- Income, expenditure, product or Value added Methods and related aggregates; nominal and real income; limitations of the GDP concept.	12
III	Circular Flow of Income and expenditure in two, three, and four-sector economy. National Income and Economic Welfare; Green Accounting.	11
IV	Classical Theory of Employment. Say's Law of Markets. Keynes' Objection to the Classical Theory; Aggregate Demand and Aggregate Supply Functions; The Principle of Effective Demand; Consumption Function - Average and Marginal Propensity to Consume; Factors influencing Consumption Spending	11
Part II		
V	The Investment Multiplier and its Effectiveness in LDCs; Theory of Investment - Autonomous and Induced Investment; Marginal Efficiency of Capital; Savings and Investment - Ex Post and Ex Ante, Equality and Equilibrium. Principle of Accelerator.	11
VI	Rate of Interest: Classical, Neo-Classical and Keynesian Theories of Interest. Indeterminateness in Liquidity Preference Theory	11
VII	IS-LM Analysis: Derivations of the IS and LM functions; IS-LM and aggregate demand; shifts in the AD curve.	11
VIII	Inflation and Unemployment Concept of inflation; determinants of inflation; relationship between inflation and unemployment: Phillips Curve in short run and long run.	11
<p>Suggested Readings:</p> <ol style="list-style-type: none"> Ackley.G (1976) : Macroeconomics: Theory And Policy, Macmillan, New York. Ahuja,H.L (2012) : Macroeconomics: Theory and Policy , S. Chand &Company, New Delhi. Ahuja,H.L (2012) : Samasti Arthshastra , S. Chand &Company, New Delhi. Lal,S.N (2012) : SamastibhaviVisleshan , Shiva Publishing House,Allahabad. Branson,W.A (1989) : Macroeconomics Theory And Policy, Harper & Row. D.L (1969) : Advanced Macroeconomics, McGraw Hill, New York. Dornbusch, Rudiger&startz, Richard (2012): Macroeconomics , Tata McGraw Hill Education. Dwivedi,D.N (2010) : Macroeconomics: Theory and Policy , Tata McGraw Hill Education. Gupta,R.D.&Rana,A.S (2009) : Keynes post-Keynesian Economics , Kalyani Publishers, New Delhi &Ludhiana. Hansen,A.H (1953) : A Guide To Keynes, McGraw Hill. Jhingan, M.L (2010): Macroeconomics , Vrinda Publications, New Delhi. Jhingan, M.L (2012) :SamastiArthshastra , Vrinda Publications, New Delhi. Shapiro, Edward (2005): Macroeconomic Analysis, Galgotia Publications, New Delhi. Sikdar,Saumyen (2011) : Principles of Macroeconomics , Oxford University Press, New Delhi. Surrey,M.J.C (1976) : Macroeconomic Themes, Oxford University Press. Romer, 		
<p>Suggested Continuous Evaluation Methods:</p> <p>Assignment / Test / Quiz(MCQ) / Seminar/ Presentations/ Research orientation of students.</p>		
<p>Suggested equivalent online :</p> <p>Swayam Coursera</p>		

BA 2ndYear, Sem. III
Course I
(Theory)

Programme/Class: Degree/BA		Year: Second	Semester: Third
Subject: Economics			
Course Code: A080301T		Course Title: History of Economic Thought	
Course outcomes:			
<ul style="list-style-type: none"> To learn and discuss, at an advanced undergraduate level, how the economic thought has evolved over time. Introducing students to the critical comparison of the contributions of the main schools of economics. To introduce & highlight before the students about Indian Economic Thinkers and their valuable contribution in the field of Economics. The classical, the marginalize revolution and its application to the theories of general and partial equilibrium, the current macroeconomic debate between the neo-classical and the Keynesian school. 			
Credits: 6		Core Compulsory	
Max. Marks: 25+75		Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w			
Unit	Topics		No. of Lectures
Part I			
I	Kautilya, Dada Bhai Naoroji, RC Dutt, BR Ambedkar, R M Lohia, Gandhian Economics.		12
II	Pt. DeenDayal Upadhyay, JK Mehta, A K Sen, J. Bhagwati,		12
III	Early Period: Economic thought of Plato and Aristotle - Doctrines of Just Cost and Just price.		11
IV	Mercantilism: Main Characteristics; Thomas Munn - Physiocracy: Natural Order, Primacy of Agriculture, Social Classes, Tableau Economique, Taxation, Turgot - Economic ideas of Petty, Locke and Hume.		11
Part II			
V	Classical Period: Adam Smith - Division of Labour, Theory of Value, Capital Accumulation, Distribution, Views on Trade, David Ricardo, Distribution, Ideas on International Trade; Thomas R. Malthus, Theory of Gluts.		11
VI	German Romantics and Socialists — Sismondi, Karl Marx — Dynamics of Social Change, Labour Theory of Value, Surplus Value, Profit, And Theory of Capitalist Crisis; Economic Ideas of J.B. Say, J.S. Mill.		11
VII	Marshall as a Great Synthesizer: Role of Time in Price Determination, Economic Methods, Ideas on Consumer's Surplus, Elasticity, Representative Firm, Quasi-Rent, Pigou: Welfare Economics; Schumpeter.		11
VIII	Marginalists: The Precursors of Marginalism ,Cournot , Gossen — The Marginalist Revolution: Jevons, Walras and Menger - Bohm-Bawark, Wicksell and Fisher; Economic Ideas of Wicksteed and Weiser.		11
Suggested Readings:			
<ol style="list-style-type: none"> Bhatia,H.L : History of Economic Thought ,Vikash Publishing House. Blackhouse,R (1985) : A History of Modern Economic Analysis, Basil Blackwell, Oxford. Ganguli, B.N(1977) : Indian Economic Thought : A 19th Century Perspective, Tata Mcgraw Hill. Hajela,T.N (2011) : AarthikVicharon Ka Itihas , Ane Books. Hajela,T.N (2011) : History Of Economic Thought , Ane Books. Hunt,E.K&Lautzenheiser,Mark (2011) : History of Economic Thought: A Critical Perspective , Phi Learning. Jhingan, M.L (2008): AarthikVicharon Ka Itihas ,Vrinda Publications, New Delhi. Kautilya (1992), The Arthashastra, Translated And Introduced By L.N.Rangarajan, Penguin Books. Loknathan,V (2009) : History of Economic Thought , S.Chand& Company. Roll,Eric : History of Economic Thought, Faber. Schumpeter, J.A(1954): Historyof Economic Analysis, Oxford University Press, New York. 			

12. Sinha, V.C (2011) : Aarthik Vicharon Ka Itihas , Mayur Pu
13. Staley, Charles.E, “A History of Economic Thought: From Aristotle To Arrow”, Blackwell Publishing.
Suggested Continuous Evaluation Methods: Assignment / Test / Quiz(MCQ) / Seminar/ Presentations/ Research orientation of students.
Suggested equivalent online : Swayam

BA 2ndYear, Sem. IV
Course I
(Theory)

Program/Class: Degree /BA	Year: Second	Semester: Fourth
Subject: Economics		
Course Code:A080401T	Course Title: Money, Banking and Public Finance	
Course outcomes:		
<ul style="list-style-type: none"> ● Understand simple concepts related with monetary economics and banking theory. ● Correlate and apply to current events & key models and concepts of monetary economics and banking theory. ● Appreciate the potential importance of monetary phenomenon in the economy. ● Understand the sources of finance both public and private ● Demonstrate the role of government to correct market failures and possible advantage of public financing. ● Understand the possible burden, benefits and distribution of various types of taxes among various classes of people, know the general trend and impact on general welfare and arouse them to suggest good and bad tax system. 		
Credits: 6		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
Part I		
I	Money and Value of Money: Money - Meaning, Functions and Classification; Gresham's Law; Role of Money in Capitalist, Socialist and Mixed Economies; Monetary Standards -Metallic and Paper Systems of Note Issue. Quantity Theory of Money - Cash Transaction and Cash Balance Approaches; The Keynesian Approach.	12
II	Supply of Money: Definitions—Determinants of Money Supply—High Powered Money and Money Multiplier—Indian Currency system.	12
III	Commercial Banking: Meaning and types; Functions of Commercial Banks; The process of Credit Creation - Purpose and Limitations; Liabilities and Assets of banks; Evolution of Commercial Banking in India after Independence; A Critical Appraisal of the Progress Of Commercial Banking after Nationalization; Recent Reforms in Banking Sector in India.	11
IV	Functions of a Central Bank; Quantitative and Qualitative Methods of Credit Control - Bank Rate Policy, Open Market Operations, Variable Reserve Ratio and Selective Methods; Role and Functions of the Reserve Bank of India; Objectives and Limitations of Monetary Policy with Special Reference to India.	11

Part II		
V	Nature and Scope of Public Finance: Meaning and scope of Public Finance; Distinction between Private and Public Finance; Public Goods Vs. Private Goods; The Principle of Maximum Social Advantage; Market Failure; Role of the Government.	11
VI	Public Expenditure: Meaning, Classification and Principle of Public Expenditure; Canons and Effects of Public Expenditure; Trends in Public Expenditure and Causes of Growth of Public Expenditure in India.	11
VII	Taxation: Sources of Public Revenue; Taxation — Meaning, Canons and Classification of Taxes; Division of Tax Burden — The Benefit and Ability-To-Pay Approaches; Impact and Incidence of Taxes; Taxable Capacity; Effects of Taxation; Characteristics of A Good Tax System.	11
VIII	Fiscal policy: Components, Instruments, Objectives. Role of Fiscal Policy in Developed and Developing Countries, Budget Structure of the Government of India, State Budget- Sources of Revenues and Expenditures. Major Tax Reforms in India. Fiscal Federalism in India: Union-State Fiscal Relations, Federal Fiscal Imbalances and the Role of Finance Commission. Finances of Local Bodies.	11
<p>Suggested Readings:</p> <ul style="list-style-type: none"> ❖ Bagchi, Amaresh (2005) : Readings in Public Finance, Oxford University Press. ❖ Cullis, John & Jones Philip (2009) : Public Finance and Public Choice, Oxford University Press. ❖ Eyster, Robert (2009) : Money and Banking- An International Text , Routledge. ❖ Gupta, Janak Raj (2011): Public Economics in India Theory and Practice, Atlantic. ❖ Gupta, S.B (2009) : Monetary Economics- Institutions, Theory & Policy , S.Chand & Company, New Delhi. ❖ Head, J.C (1974): Public Goods and Public Welfare, Durham, NC, Duke University Press. ❖ Inge Kaul, Pedro Conceicao (2006): The New Public Finance, Oxford University Press. ❖ Jhingan, M.L (2012) : Monetary Economics , Vrinda Publications, New Delhi. ❖ Jhingan, M.L (2012) : Maudrik Arthshastra , Vrinda Publications, New Delhi. ❖ Johansen, Life (1965) : Public Economics, Chicago: Rand McNally. ❖ Khanna, Perminder (2005): Advanced Study in Money and Banking: Theory and Policy Relevance in The Indian Economy , Atlantic. ❖ Lal, S.N (2012): Mudra, Banking, Avam Videshi Vinimay , Shiva Publishing House, Allahabad. ❖ Margolis, J & Guitton, H : Public Economics (1974), Mcmillan. ❖ Musgrave, R.A (1959) , The Theory Of Public Finance, McGraw Hill. ❖ Musgrave, R.A & P.B. Musgrave (1989) : Public Theory: Theory & Practice, McGraw Hill. ❖ Nadar, E. Narayanan (2013) : Money and Banking , PHI Learning Press. ❖ Paul, R.R (2011): Money, Banking & Exchange , Kalyani Publishers, Delhi. ❖ Seth, M.L (2012) : Maudrik Arthshastra , Laxmi Narayan Publications, Agra. ❖ Shome Parthasarathi (2002): India's Fiscal Matters, Oxford University Press, New Delhi. ❖ Uppal, R.K (2011): Money, Banking and Finance in India- Evolution & Present Structure New Century Publications. 		
<p>Suggested Continuous Evaluation Methods: Assignment / test / Quiz (MCQ) / Seminar/Presentations/ Research orientation of students</p>		
<p>Suggested equivalent online : Swayam Coursera</p>		

BA 3rd Year, Sem. V
Course I
(Theory)

Programme/Class: Degree/BA	Year: Third	Semester: Fifth
Subject: Economics		
Course Code: A080501T	Course Title: Economic Growth and Development	
Course outcomes:		
<ul style="list-style-type: none"> • Students should be able to comprehend the concept and meaning of economic growth and economic development. • Students should be able to distinguish between economic growth and economic development. • Students should be able to comprehend the issues and challenges in economic growth and development. • Students should be able to comprehend and explain the concept of poverty and human development & the related concepts. • Students should be familiar with the approaches to development. • Students should be able to understand and explain the factors and variable of economic development. • Students are able to understand how international factors facilitate and impede economic development. 		
Credits: 5		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks: 40
Total No. of Lectures-Tutorials-Practical (in hours per week): P- 2/w		
Unit	Topics	No. of Lectures
Part I		
I	Meaning and Measurement of Economic Growth and Development- Measuring Development and Development Gap, GDP, GNP, Per Capita Income, Factors affecting Economic growth and Development.	10
II	Concept of Poverty and Inequality, Vicious cycle of poverty, Lorenz Curve, Gini Coefficient Concept of Human Development, Human Development Index, Physical Quality of Life Index, Quality of Life Indices. Hunger Index, Happiness Index, Development and Sustainability. Concept of Sustainable Development. Millennium Development goals.	10
III	Lewis model of labour surplus economy, Rosentain Rodan's theory of Big Push, Nelson's Level equilibrium trap, balanced vs Un-balanced growth, Rostow's stages of growth, Harrod and Domar Growth models.	10
IV	Theory of Demographic Transition, Population as Limits to Growth. The Concept of Inclusive Growth- with Reference to India. Market Failure and Government Failure, Food Security, Education, Health and Nutrition, Gender and Development.	10
Part II		
V	Development & Underdevelopment: an Overview; The Characteristics and Explanations Of Underdevelopment- Vicious Circle of Poverty, Circular Causation, Dualism-Social, Technological, Financial, Organizational, Model of Dual Economy, Lewis, Ranis-Fei, Jorgenson, Dependency Theories of Underdevelopment.	10
VI	Models of Technical Progress, Embodied and Disembodied Technical Progress, Neutral Technical Progress- Hicks, Harrod, Solow, Kaldor, Mirrlees Technical Progress Function, Arrow's Learning by Doing Approach to Economic Growth.	10
VII	Accumulation Endogenous growth, Intellectual capital, Role of Learning, Education and Research, Explanations of Cross country Differentials in Economic Growth, Information Paradigm-Stiglitz	8
VIII	International Trade, Aid and Finance in the Development of Developing Countries-with special reference to India. FDI & FII, Role of Technology Transfer and Multinational Corporations in promoting development in development of developing countries-with Special Reference to India.	7
Suggested Readings:		
❖ Barro, Robert J and Xavier Sala-i- Martin, Economic Growth, The MIT Press,		

Cambridge, Latest Edition.

- ❖ Basu, Kaushik (2010): Analytical Development Economics: The Less Developed Economy, Oxford University Press.
- ❖ Dasgupta, Dipankar: Growth Theory, Oxford University Press, 2007
- ❖ Ghatak, S., An Introduction to Development Economics. Allen and Unwin London, latest edition.
- ❖ Hayami, Y., Development Economics, Oxford University Press, New York, 2010 (5th Impression)
- ❖ Hayami, Yujiro&Godoyoshihisa (2005) : Development Economics: From the Poverty to the Wealth of Nations, Oxford University Press.
- ❖ Hendrik Van Den Berg, Economic Growth and Development, McGraw-Hill International Edition, 2005
- ❖ Jhingan ,M.L (2013): Economics of Development and Planning, Vrinda Publications, NewDelhi.
- ❖ Jhingan ,M.L (2013): Vikas Ka ArthshastraAwamNiyojan, Vrinda Publications, NewDelhi.
- ❖ Lal ,S.N (2012):Vikas, Niyojan Awam Paryavaran, Shiva Publishing House,Allahabad.
- ❖ Lekhi, R.K (2013): Economics of Development and Planning, Kalyani Publishers, New Delhi.
- ❖ Meier, G.M., Leading Issues in Economics Development, Oxford University Press, New Delhi, Latest edition.
- ❖ Mishra,S.K&Puri,V.K (2012): Economics of Development and Planning, Himalaya Publishers, Mumbai.
- ❖ Ray Debraj, Development Economics, Oxford University Press, Latest Edition.
- ❖ Singh, Kartar&Shishodia (2007): Environmental Economics: Theory andApplications, SageIndia.
- ❖ Singh,S.R(2012):EnvironmentalEconomics,APHPublishingCorporation,Delhi.
- ❖ Somashekar, NT: Developmental Economics, New Age Publication (Latest edition)
- ❖ Taneja,M.L&Myer,R.M (2011): Arthshastra Ki YojnayeAwamVistaar, Visha Publishing Company,Jalandhar (New Delhi).
- ❖ Thirlwall, A.P., Growth and Development with Special Reference to Developing Economies, Macmillan, UK, 1999.
- ❖ Todaro,Michael.P&Smith,Stephen.C (2011) : Economic Development, Pearson.

BA 3rd Year, Sem. V
Course II (Optional)
(Theory)

Programme/Class: Degree/BA	Year: Third	Semester: Fifth
Subject: Economics		
Course Code: A080502T	Course Title: Environmental Economics	
<p>Course outcomes:</p> <ul style="list-style-type: none"> ● Students should be familiar with the basic concepts of ecology environment and economy. ● Students to understand the solution to environmental problems- the command and control approach, market based methods, tax tradable pollution permit, etc, carbon trading ● Students should be familiar with the concept of Sustainable development, environmental impact assessment CO 5: Global and local environmental concerns. ● Students should be comprehend the Local Issues of Economic Bearing related to environment & development. ● Students should realize the importance and influence of environment on the economy including the quality of manpower. ● Students should realize the importance to make cleaner environment so as to achieve harmonious development. ● Students should comprehend that environmental problem is not the problem of a single country or region but 		

<p>a global problem/issue.</p> <ul style="list-style-type: none"> • Demonstrate an awareness of economic growth problems, issues in globalisation, and provide grounding in major growth strategies and development. 		
Credits: 5		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks: 40
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
Part I		
I	Introduction: Key environmental issues and problems, economic way of thinking about these problems, basic concepts from economics; Pareto optimality and market failure in the presence of externalities; property rights and other approaches.	10
II	The Design and Implementation of Environmental Policy: Overview, Pigouvian taxes and effluent fees, tradable permits, implementation of environmental policies in India and international experience; trans-boundary environmental problems; economics of climate change	10
III	Environmental Valuation Methods and Applications: Valuation of non-market goods and services--theory and practice; measurement methods; cost-benefit analysis of environmental policies and regulations.	10
IV	Sustainable Development: Concepts; measurement; perspectives from Indian experience.	7
Part II		
V	The Theory of Externality- Positive & Negative Externality; Public Goods; Private Goods; Public Bads; Market Failure and Pigouvian Solution- Pigouvian Tax.; Coase's Theorem And Property Rights; Eco- Labelling; Eco-Efficiency.	8
VI	Social Limits to Growth Model; Green Accounting; Environmental Valuation- Meaning, Need for Environmental Valuation, Methods of Environmental Valuation; Difficulty in Measuring Environmental Values, Environmental Damages and Its Valuation.	10
VII	Indian Constitution and the Environment; Environmental Management- Meaning and Concept, Objectives and Goals, Obstacles; Environmental Impact Assessment; Environmental Education and Awareness-Dilemma of Environmental Ethics and Practical Problems, Environmental Education in India.	10
VIII	Population and Environment; Trade and Environment in the WTO Regime; Climate Change- Meaning and Concept, Ozone Depletion, Acid Rain, Global Warming and Greenhouse Effect; Indian Environmental Issues and Legislations; Role of Judiciary in Environmental Protection and Conservation; International Environmental Issues and Legislations, Carbon Trading.	10
<p>Suggested Readings:</p> <ul style="list-style-type: none"> • Bharucha, Erach : Paryavaran Adhyann, Orient Blackswan. • Bhattacharya, Rabindra Nath (2002): Environmental Economics – An Indian Perspective, Oxford University Press. • Eugene, T (2005) : Environmental Economics, Vrinda publications, Delhi. • Jhingan, M.L & Sharma, C.K (2009) : Environmental Economics Theory Mgt & Policy, Vrinda publications, Delhi. • Kolstad, Charles. D (2012): Intermediate Environmental Economics, Oxford University Press. 		

- Nagre,Vijay.H (2012) : Environmental Economics, Chandralok Prakashan.
- Singh, Kartar & Shishodia (2007): Environmental Economics: Theory and Applications, Sage India.
- Singh, S.R(2012): Environmental Economics, APH Publishing Corporation, Delhi.
- Smith, Stephen (2011): Environmental Economics: A Very Short Introduction, Oxford University Press.
- Tripathi, Daya Shanker : Paryaavaran Addhyayan, Motilal Banarasidass Pvt Ltd.

**B A 3rdYear,
Sem.V Course II (Optional)
(Theory)**

Program/Class: Degree /BA	Year: Third	Semester: Fifth
Subject: Economics		
Course Code:A080503T	Course Title: International Economics	
Course outcomes:		
<ul style="list-style-type: none"> ● Students should be able to understand and explain the concept, need, significance and scope of international economics. ● Students should be familiar with the approaches of international trade. ● Students should be familiar with and are able to explain the economic integration at the global level and the formation of groups. ● Students are familiar with the international organizations and their objectives. Students should be able to analyse the importance and relevance of these international organizations. 		
Credits: 5	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks:40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
Part I		
I	Need, Significance and Scope of International Economics. Early Trade Theory-Mercantilism; The Classical Theories of Trade -Adam Smith, David Ricardo; Opportunity Cost Approach; Terms of Trade-Meaning and Concepts, Factors affecting Terms of Trade; Mill's Reciprocal Demand Analysis.	8
II	Free Trade and Protection-Meaning of Free Trade, Arguments For and Against Free Trade, Meaning of Protection, Arguments for Protection-Economic and Non-Economic Arguments; Protection and Less Developed Countries.	7
III	Theories and Forms of Economics Integration-Meaning &Benefits; Forms of Economic Integration- Custom Union: Production and Consumption Effects of Customs Union; Problems Involved in the Formation of Customs Union; Political Economy of Protection; SAFTA,BRICS,IBSA.	10
IV	Balance of Payments-Concepts ; Adjustment Mechanisms of Balance of Payments- Adjustment Through Variations in Exchange Rates, Devaluation and Balance of Payments Adjustment, The Elasticity Approach, Marshall-Lerner Condition.	10
Part II		

V	Heckscher-Ohlin Theorem, The Leontief Paradox, Post-Heckscher-Ohlin Theories of Trade- Technological Gap Model; The Krugman Model, Effects of Growth on International Trade- Production & Consumption Effects, Export Pessimism, Immiserising Growth; Gains from Trade-Meaning and Types, Factors Determining Gains from Trade.	10
VI	International Financial Institutions-IMF,WORLD BANK,ADB; GATT, WTO- TRIPS &TRIMS, WTO and India;, UNCTAD, North-South Trade Dialogue, South-South Cooperation; Globalization; FDI.	10
VII	Quantitative Restrictions: Quota-Meaning, objectives, Types and Effects of Import Quotas; Tariffs-Meaning Types and Effects of Tariffs; Non-Tariff Barriers-Meaning, Classification and Types.	10
VIII	Foreign Exchange-Meaning and Instruments, Exchange Rate Determination, Mint Par Parity theory, Purchasing Power Parity Theory, Hedging, Foreign Exchange Rate Policy- Fixed, Flexible & Multiple Exchange Rate System; Convertibility of Rupee in Current Account and Capital Account, Move Towards Capital Account Convertibility; Global Financial Crisis.	10
Suggested Readings:		
<ul style="list-style-type: none"> ● Agarwal,Babita (2009) : Antarrastriya Arthshastra, Omega Publications. ● Bhatia,H.L (2006) :International Economics, Vikash Publishing House. ● Cherunilam,Francis (2008) :International Economics” Tata McGraw Hill Education. ● Field,Alfred.J & Appleyard, Dennis.R (2013) : International Economics, McGraw Hill Education. ● Gerber,James (2012) : International Economics, Pearson. ● Jhingan, M.L (2011): Antarrastriya Arthshastra, Vrinda Publications, New Delhi. ● Krugnan,Paul.R & obstfeld, Maurice (2008) : International Economics, Pearson. ● Lal,S.N (2012) :Antarrastriya Arthshastra, Shiva Publishing House,Allahabad. ● Mannur,H.G (2001) :International Economics, Vikash Publishing House Pvt Ltd. ● Salvatore,Dominick (2012) : International Economics: Trade & Finance, Wiley Publishers. ● Sinha,V.C., Sinha,Pushpa & Sinha,Vivek (2011) : Antarrastriya Vyapar Avam Vitt, Mayur Publications. ● Vaishya,M.C. & Singh,Sudama (2006) : International Economics , Oxford &IBH Publishing House, Delhi. 		
Suggested Continuous Evaluation Methods:		
Assignment / test / Quiz(MCQ) / Seminar/Presenatations/ Research orientation of students		
Suggested equivalent online :		
Swayam		

BA 3rd Year, Sem. V

Course III

(Project)

Program/Class: Degree /BA	Year: Third	Semester: Fifth
Subject: Economics		
Course Code: A080603R	Course Title: Elementary Statistics based Project	
Course Outcome:		
<ul style="list-style-type: none"> ● Students to be familiar with the concepts in Statistics. ● The concepts comprehended by the students shall be put to use in practice. 		

- The students become familiar with the practical aspects of preparing a questionnaire/interview schedule and putting them in usage.
- The information/data collected by the students should be analyzed with the help of Statistical Tools taught so as to derive inferences.
- The students shall experience the practical aspect of the theory of statistics being taught in the class room environment.
- The students are able to use statistical tools vis-à-vis given real life situation.
- Practical work to be based on the topics covered in the contents given below.

Credits: 3	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks:40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
I	Introduction to Basic Concepts in Statistics: Population, Sample, Parameter, Data-Meaning & types. Questionnaire, Schedule & Interview Schedule (meaning, concept & types), Frequency Distribution, Cumulative frequency; Graphic and Diagrammatic representation of data.	45 (Class room teaching and practical)
II	Measures of Central Tendency - Mean, Median, Mode, Geometric mean and Harmonic mean. (Meaning, concept, properties & methods of measurement-in brief). Measure of Dispersion: Range, Mean Deviation, Standard deviation, Coefficient of Variation, Quartile deviation, Skewness and Kurtosis (Meaning, concept, properties & methods of measurement-in brief)	
III	Correlation: Meaning, Concept, Types & Properties. Methods of Regression: Meaning and Concept. Least squares method, Interpretation of Regression Coefficients. Meaning, concept & types of Sampling. Meaning & concept of Hypothesis & hypothesis testing.	
IV	Time Series: Concept, Meaning & Components - Determination of Regular, Trend and Seasonal Indices. Index Number: Concept, Classification of Index Numbers-price relative, quantity relative, value relative & special purpose (in brief). Consumer Price Index(CPI), Whole Sale Price Index (WPI), Methods of Construction of Index Numbers- i Unweighted & ii Weighted indices (in brief). Test of Adequacy of Index Number Formulae (in brief).	

Suggested Readings:

- Elhance,D.L (2010) : Sankhiki Ke Siddhant (Hindi), Kitab Mahal.
- Greenlaw, Steven A (2005): Doing Economics: A Guide to Understanding and Carrying Out Economic Research.
- Gupta,S.P (2011) : Statistical Methods, Sultan Chand & Sons, Delhi.
- Hazarika,Padmalochan (2006) : Essential Statistics for Economics and Commerce , Akansha Publishing House.
- Kothari, C.R: Research Methodology: Methods & Techniques. New Age International Publishers ISBN (13) : 978-81-224-2488-1
- Leighton,Thomas (2011) : Using Statistics in Economics, Tata McGraw Hill Education.

- Lind, Wathen & Marchal (2013): Basic Statistics for Business & Economics, McGraw Hill Education.
- Newbold, Paul (2008) : Statistics for Business and Economics , Pearson Education.
- Richard ,I. Levin. H. Siddiqui Masood S. Rubin David Sanjay Rastogi (2017): Statistics for Management. Pearson. ISBN-10 8184957491
- Sharma, J.K. (2011) : Business Statistics “Pearson Education.

Note:

- ❖ Aforestated Four units given are to be taught in the classroom keeping in view that the project is based on the use/application of the Statistical tools taught & as per the focus/objective of the problem.
- ❖ Students are expected to develop an understanding of how to prepare a questionnaire/interview schedule for the usage.
- ❖ The field work will be arranged by the department for which an institutional mechanism will be developed by the respective institution.
- ❖ The students will prepare a thorough report after the completion of the field work and submit it for the evaluation thereafter.
- ❖ The template/format for the submission of the report will be developed by the respective department.

**BA3rd Year, Sem. VI
Course I
(Theory)**

Program/Class: Degree /BA	Year: Third	Semester: Sixth
Subject: Economics		
Course Code: A080601T	Course Title: Indian Economy & Economy of Uttar Pradesh	
Course Outcome :		
<ul style="list-style-type: none"> ● Students should be able familiar with the basic characteristics of Indian economy, ● Students should be able familiar with the it's potential on natural resources of Indian economy and the economy of Uttar Pradesh. ● Students are able to understand the importance, causes and impact of population growth and its distribution, translate and relate them with economic development. ● Students are able to develop an understanding about Uttar Pradesh , its demographic feature, natural resources and factors that cn stimulate its economic growth and development. ● Students should be familiar with the rural development of Uttar Pradesh over the period of time. ● Students should be familiar with the industrial development in India and in Uttar Pradesh. 		
Credits: 5		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks: 40
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
Part I		

I	Structure and Features of Indian Economy: Indian economy as a Developing Economy. Comparative Development of Indian States.	8
II	Agricultural Sector: Institutional Reforms, Technological change in Agriculture, Terms of Trade between Agriculture and Industry; Agricultural Policy, Policies for Sustainable Agriculture. Agrarian Crisis and Agricultural Labour.	10
III	The Industrial Sector: Industrial Policy; Public Sector Enterprises and their Performance, Privatization and Disinvestment debate, Small, Medium and Large-scale Sector, Industrial Labour, trade Union Movement.	10
IV	Planning in India: Objectives and Strategy of Planning; Success story of Indian Plans; Strategy of Inclusive Growth, Resource mobilization for Development.	10
Part II		
V	Nature, Features, Demographic Profile, Status of Natural Resources, Major Factors affecting growth and development in Uttar Pradesh. Economic and non-economic factors in economic development of Uttar Pradesh.	10
VI	Sectoral growth pattern in Uttar Pradesh; Economic growth in Uttar Pradesh and Indian economy: A comparison; Infrastructural development of Uttar Pradesh.	7
VII	Pattern of land-holding and irrigation; production and productivity in agriculture, Farm mechanization, Crop diversification, agricultural credit, Agricultural policy and strategies in Uttar Pradesh, Rural Development in Uttar Pradesh.	10
VIII	Problems and Policies. Major industries in Uttar Pradesh, Pattern of Industrial Development in Uttar Pradesh, Industrial Policy in Uttar Pradesh, Growth pattern of Services sector and Its linkages of other sectors of UP Economy. Micro, Small, Medium Enterprises (MSMEs) in Uttar Pradesh. One Product One District (OPOD).	10
Suggested Readings:		
<ol style="list-style-type: none"> 1. Agarwal,,M K (2009): Uttar Pradesh ka Arthik Vikas. New Royal Book Company 2. Annual Financial Statement (Budget) of the Government of Uttar Pradesh published in different years & the latest. 3. Annual Financial Statement (Budget) of the Government of Uttar Pradesh published in different years & the latest. 4. Annual Financial Statement (Budget) various years & Latest published by the Government of India. 5. Economic Surveys, Government of India (Hindi/English) 6. Indian Economy by Mishra & Puri. Himalaya Publishing House (Hindi /English) 7. Indian Economy by Uma Kapila, Academic Foundation 8. Indian Economy. Rudra Dutt & Sunderam. S. Chand & Company (Hindi /English) 9. Mishra, Arvind Narayan & Atul Chandra (2018):The Economy of Uttar Pradesh. Gutenberg Publication ISBN: 9789386240224, 9789386240224 10. Mishra, Arvind Narayan & Atul Chandra (2018):The Economy of Uttar Pradesh. Gutenberg Publication ISBN: 9789386240224, 9789386240224 11. Publications of the Government of Uttar Pradesh. 12. Publications of the Government of Uttar Pradesh. 13. Uttar Pradesh Human Development Report, UNDP, 2008. 14. Uttar Pradesh Human Development Report, UNDP, 2008. 15. Uttar Pradesh State Development Report, Volume I & II, State Plan Division, Planning Commission, 		

Government of India, 2014.
16. Uttar Pradesh State Development Report, Volume I & II, State Plan Division, Planning Commission, Government of India, 2014.

Suggested Continuous Evaluation Methods:
Assignment / test / Quiz(MCQ) / Seminar/ Presentations/ Research orientation of students

Suggested equivalent online :
Swayam

BA 3rdYear
Sem. VI
Course II (Optional)
(Theory)

Program/Class: Degree /BA	Year: Third	Semester: Sixth
Subject: Economics		
Course Code: A080602T	Course Title: Agriculture Economics	
Course Outcome		
<ul style="list-style-type: none"> ● Students should be able to comprehend and explain the approaches to economic development with respect to dualistic development. ● Students should be able to understand and explain the basics of agriculture economics. ● Students should be familiar with labour issues in agriculture sector. ● Students should be able to explain the significance of agriculture in the economic growth and economic development of an economy and in case of Indian Economy. ● Students should be familiar with the institutional initiatives to strengthen the rural and agricultural development to achieve self sufficiency. ● Students should be able to comprehend the role of credit in the development of agriculture in a country like India and the significance of institutional mechanism in this regard. 		
Credits: 5		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
Part I		
I	Models of Agricultural Development: Physiocrats approach, W. A. Lewis model, Fei & Ranis Model, Schultz Theory of Agricultural Development, Jorgenson's Dual Economy Model	10
II	Agricultural Production Function, Supply Response, Farm Size, Returns to Scale and Productivity. Cobweb Theorems. Farm Size and Productivity Debate; Theoretical And Empirical Findings. Agricultural Price Policy in India.	10
III	Labour in Agriculture- Interlocking of Factor Markets, Labour and Work Force in Rural Farm and Non-Farm Sectors. Agricultural Labour- Problem and Policy. Concept and Measurement of Rural Poverty & Employment, Poverty Alleviation Programmes (in brief-the Objectives, Achievements & the Shortcomings).	10
IV	Current Issues in Indian Agriculture- Poverty & Food Security in India, Agro- Subsidies in India, Subsidy Vs Public Investment. Export and	10

	Imports of Agricultural Commodities, Terms of Trade in Indian Agriculture, WTO and Indian Agriculture-Bali Negotiations	
Part II		
V	Role Of Agriculture in Economic Growth and Development in India. Backward, Forward Linkage between Agriculture and Industry, Approaches towards Agriculture And Allocation of Resources under Different Plans in India. Employment Elasticity in Indian Agriculture, Challenges & Issues Regarding Agricultural Area Expansion, Production and Productivity in India (With Focus On Post Reform (Post 1991 & 1995) Period.	10
VI	Land Reforms in India & Its Contemporary Relevance, Green Revolution and the Need for Second Generation, Green Revolution, Role of Infrastructural Support-Irrigation, Power, Seeds Fertilizers, Marketing Support System and Roads in Agricultural Development in India..	10
VII	Role of Credit in Agricultural Development, Institutional & Non-Institutional Sources of Credit in India, Cooperative Movement in India (In Brief). Role of Schedule Commercial Banks, Lead Banks, Regional Rural Banks and NARBAD to Promote Agricultural Development.	8
VIII	Agricultural Marketing: Meaning and Concept. Structure of Agricultural Markets in India, Issues and Challenges in the Marketing of Agricultural Products in India (With Focus On The Post Reform Period-Post 1991). Agricultural Diversification: Meaning, Concept & Issues. Crop Diversification: Meaning, Concept and Issues. Farm Incomes and Employment in Indian Agriculture.	7
Suggested Readings:		
<ul style="list-style-type: none"> ● Bardhan, P. (1984) Land, Labour and Poverty; Essays in Economic Development, OUP, New Delhi. ● Bhaduri, A. (1984), The Economic Structure of Backward Agriculture; Macmillan, Delhi. ● Bhalla, G.S., (2007) Indian Agriculture since Independence, National Book Trust, India ● Bharadwaj, K. (1974), Production Conditionin India Agriculture; OUP, Cambridge. ● Black, J.D, (1953) Introduction to Economics for Agriculture, Macmillan. ● Dantawala, M.L. et al. (1991): Indian Agricultural Development since Independence, Oxford & IBH, New Delhi. ● Dash, Mrutyunjay (2013): Agricultural Economics, Anmol Publications. ● Ghatak, Sand K. Ingerscant(1984),Agriculture and Economic Development; Select Books, New Delhi. ● Griffin, K.(1973): Political Economy of Agrarian Change. ● Gupta,P.K (2012) : Agricultural Economics, Vrinda Publications,Delhi. ● Gupta,P.K (2012) : Krishi Arthsastra , Vrinda Publications,Delhi. ● Khusro, A.M.(1973), The Economics of Land Reforms and Farm Size in India, MacMillan. ● Kumar,N.S.Ravi (2010) : Agricultural Economics, Neha Publishers. ● Lekhi,R.K(2013) : Agricultural Economics, Kalyani Publishers. ● Lekhi,R.K(2013) : Krishi Arthsastra, Kalyani Publishers. ● Mahajan, Ashwani (2010): Agricultural Economics, Centrum Press. ● Mellor, J.W., The Economics of Agricultural Development, Vora and Co., Bombay, 1964. ● Raghavan and L. Sarkar (Eds.) (1996): Poverty and Employment: New Delhi. ● Raj, K.N. et.al. (1988): Essays in the Commercialization of Indian Agriculture; OUP, New Delhi. ● Rao, CHH (1993):Agricultural Growth, Rural Poverty and Environmental Degradation in India, OUP, NewDelhi. ● Rao, CHH, (1975): Technological Change and Distribution of Gains in Indian Agriculture, MacMillan. ● Rudra, A. (1982): India Agriculture Economics; Myths and Reality: Allied Publishers, New, Delhi. 		

- Sarap Kailash (1991): Interlinked Agrarian Markets in Rural India, Sage Publication, New Delhi.
- Schultz, T.W.(1964): Transforming Traditional Agriculture, Yale University Press.
- Soni, R.N (2011): Krishi Arthshastra Ke Mukhya Vishay, Vishal Publishing Company,Jalandhar (New Delhi)
- Soni, R.N (2011): Leading Issues In Agricultural Economics, Vishal Publishing Company,Jalandhar (New Delhi)
- Sunder,I (2010): Principles of Agricultural economics, Neha Publishers.
- Talathi, J.M (2008): Introduction To Agricultural Economics And Agribusiness Management, Ane Books.
- Taylor, H.C., (1949), Outlines of Agricultural Economics, MacMillan.
- Verma, N.M.P. (1990), Irrigation Change and Agricultural Development, Uppal, New Delhi.

BA 3rdYear, Sem. VI
Course III(Optional)
(Theory)

Program/Class: Degree /BA	Year: Third	Semester: Sixth
Subject: Economics		
Course Code: A080603T	Course Title: Elementary Mathematics	
Course Outcome		
<ul style="list-style-type: none"> ● Students should be familiar with the basis concepts of mathematics and their application in economics. ● Students are able to comprehend & explain the concepts of straight lines slope etc of mathematics and its application in economics. ● Students should be able to understand basics of differential & its application in economics. ● Students should be able to understand and work with matrices and determine if a given square matrix is invertible. ● Learn about and work with vector spaces and subspaces. ● Students are able to understand and work with the concepts of linear programming & graphic methods. 		
Credits: 5		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
Part I		
I	Basic Concepts: Variables, Sets, Functions, Equations, Identities, Systems of Equations	9
II	Application of Straight Line System, Slope of the Line, Homogeneous Function.	9
III	Role Of Mathematical Techniques In Economic Analysis, Theory of Numbers, Indices and Factorization.	9
IV	Progression, Growth Rate, Equilibrium.	9
Part II		
V	Basics of Calculus: Rules of Differentiation of a Function; Maxima and Minima,	9
VI	Elasticities; Inter- relationships among Total, Marginal and Average Cost and Revenues; Constrained Optimisation Problem; Integration of a Function, Consumer's and Producer's Surplus	10

VII	Matrix and Determinants: Various types of Matrices, Determinants, Inverse of a Matrix, Cramer's Rule.	10
VIII	Concept of Linear Programming — Graphic Methods.	10
Suggested Readings:		
<ol style="list-style-type: none"> 1. Agarwal, D.R. (2009): Mathematics for Economics, Vrinda Publications, Delhi. Livernois, John., Rees, Ray., & Hoy, Michael (2012) : Mathematics for Economics , PHI Learning. 2. Agarwal, D.R. "Prarambhik Ganitiya Arthshastra (Hindi), Vrinda Publications, Delhi. 3. Allen, R.G.D (2008) : Mathematical Analysis for Economics , AITBS. 4. Bhardwaj, R.S(2006): Mathematics for Economics and Business, Excel Books. 5. Chiang, A.C & Wainwright, Kevin (2013) : Fundamental Methods of Mathematical Economics" McGraw Hill Publication. 6. Dowling, Edward.T(2005): Schaum's Easy Outline of Introduction to Mathematical Economics , Tata Mcgraw Hill Education. 7. Madnani, G M K : Mathematics for Economics. Sultan Chand & Sons 8. Mishra, J.P. "Ganiteeya Arthshastra", Pratiyogita Sahitya. 9. Rosser, Mike (2003) : Basic Mathematics for Economists , Routledge. 10. Seth, M.L., " Arthshastramei Prarambhik Ganit", Laxmi Narayan Publications, Agra. 11. Sharma, J.K(2007): Business Mathematics, Ane Books Pvt.Ltd. 12. Yamane, Taro (2007) : Mathematics For Economists : An Elementary Survey , PHI Learning 		
Suggested Continuous Evaluation Methods:		
Assignment / test / Quiz (MCQ) / Seminar/ Presentation/ Research orientation of students		
Suggested equivalent online : Swayam		

BA 3rd Year, Sem. VI
Course IV
(Project/Dissertation)

Program/Class: Degree/BA	Year: Third	Semester: Sixth
Subject: Economics		
Course Code: A080604R	Course Title: Project/Dissertation	
Course outcomes:		
<ul style="list-style-type: none"> ● The objective of introducing Dissertation/Project at the graduation level is to familiarise, acquaint and experience the local issues of economic implication or focused on economic wellbeing and behaviour of consumers/citizens. ● It aims at enabling the students to use and apply the learned economic principles vis-a-vis local economic issues. ● To enable them to learn preparation of questionnaire/interview schedule. ● The Template/Format of the Dissertation/Project shall be developed by the respective Department. ● The idea behind this is to develop economic thinking in the students through direct experience to real life. 		
Credits: 3		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks: 40
Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w		
Unit	Topics	No. of Lectures
I	Dissertation Topic on the Local/Current Issues with Economic Focus plus Presentation using Ppt. Dissertation Report will be prepared using Statistical/Research Techniques .Surveys, Questionnaire/interview schedule. Questionnaire/Interview Schedule must be attached with the report as	45

	annexure.	
<p>Suggested Readings:</p> <ul style="list-style-type: none"> ● Choubey, Varanya (2018): Research Writing: The Structural Challenge of Communicating Knowledge + A Method to Meet it. ISBN-13: 978-1974673162 & ISBN-10: 1974673162 ● Greenlaw, Steven A (2005): Doing Economics: A Guide to Understanding and Carrying Out Economic Research, Houghton Mifflin Harcourt (HMH). ● Kothari, C R (2013): Research Methodology. New Age International Publishers. ● Paliwal, Neha & Surendra Khatri (2018): Sodh Pravidhi. National Publishing House. ISBN: 9788180181726, 8180181723 ● Pandey Arun & Ganesh Pandey (2009): Sodh Pravidhi. Radha Publication. ISBN-10 : 8174873805 ● Sharma, Vinay Mohan(2018): Sodh Pravidhi. Mayur Books. ● Thomson, Williams (2011): A Guide for the Young Economists. MIT Press 		
<p>This course can be opted as an elective by the students of following subjects: Open for all</p>		
<p>Suggested Continuous Evaluation Methods: Fieldwork, Seminar, Presentations, VIVA, Dissertation.</p>		
<p>Suggested equivalent online : Swayam</p>		



DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the

Program: M.A./M.Sc., Subject: GEOGRAPHY (College & Campus)

Structure of Syllabus Developed by			
Name of BoS Convener/ BoS Member	Designation	Department	College/University
Prof. Jaswant Singh	Director & Convener (Campus)	Geography	Institute of Earth Sciences, RMLAU
Prof. Jaish Raj Shukla	Professor & Convener (College)	Geography	K.S. Saket P.G. College, Ayodhya

Course Code		Course Title	Credits	T/P	Evaluation	
					CIE	ETE
A	B	C	D	E	F	G
SEMESTER I (YEAR I)						
A110701T	CORE	Advance Geomorphology	5	T	25	75
A110702T	CORE	Advance Climatology	5	T	25	75
A110703T	CORE	Advance Oceanography	5	T	25	75
A110704T	First Elective (Subject Elective) (Select any one)	Rural Geography	5	T	25	75
A110705T		Urban Geography	5	T	25	75
A110706P	Second Elective (Subject Elective) (Select any one)	Cartography	5	P	50	50
A110707P		Field Study Report	5	P	50	50
SEMESTER II (YEAR I)						
A110801T	CORE	India : Physical Geography	5	T	25	75
A110802T	CORE	Economic Geography	5	T	25	75
A110803T	CORE	Environmental Geography	5	T	25	75
A110804T	Third Elective (Generic Elective) (Select any one)	General Geography	5	T	25	75
A110805T		Disaster Management	5	T	25	75
A110806P	Fourth Elective (Subject Elective) (Select any one)	Advance Quantitative Techniques	5	P	50	50
A110807P		Remote Sensing	5	P	50	50

SEMESTER III (YEAR II)						
A110901T	CORE	History of Geographic Thought	5	T	25	75
A110902T	CORE	Regional Development & Planning	5	T	25	75
A110903T	CORE	Geography of Resources	5	T	25	75
A110904T	Fifth Elective	Bio Geography	5	T	25	75
A110905T	(Subject Elective) (Select any one)	Population Geography	5	T	25	75
A110906P	Sixth Elective	Field Training (Tour Report)	5	T	50	50
A110907P	(Subject Elective) (Select any one)	Geographic Information System (GIS)	5	T	50	50
SEMESTER IV (YEAR II)						
A111001T	CORE	Agricultural Geography	5	T	25	75
A111002T	CORE	Political Geography	5	T	25	75
A111003P	Seventh Elective	Field Study (Socio-economic Survey)	5	P	50	50
A111004P	(Subject Elective) (Select any one)	Advance Surveying	5	P	50	50
A111005P	Research Project/Dissertation	Major Research Project / Dissertation	10	P	50	50



DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the

Program: M.A. Subject: SOCIOLOGY (Campus & College)

Structure of Syllabus Developed by				
	Name of BoS Convener/BoS Member	Designation	Department	College/ University
1.	Prof. Anup Kumar	Convener (Campus)	Sociology	Dr. Rammanohar Lohia Avadh University, Ayodhya
2.	Prof. Anil Kumar Srivastava	Convener (College)	Sociology	J.N.M.P.G. College, Barabanki

Course Code		Course Title	Credits	T/P	Evaluation	
A	B	C	D	E	CIE	ETE
SEMESTER I (YEAR I)						
A070701T	CORE	Classical Sociological Theories	5	T	25	75
A070702T	CORE	Methodology of Social Research	5	T	25	75
A070703T	CORE	Sociology of Development and Planning	5	T	25	75
A070704T	FIRST ELECTIVE (Subject Elective) (Select any one)	Sociology of Culture	5	T	25	75
A070705T		Indian Social Thinkers	5	T	25	75
A070706T		Sociology of Social Movements	5	T	25	75
A070707T		Sociology of Information Society	5	T	25	75
A070708P	SECOND ELECTIVE (Subject Elective) (Select any one)	Project Presentation on Urban Sociology	5	P	50	50
A070709P		Project Presentation on Tribal Studies	5	P	50	50
SEMESTER II (YEAR I)						
A070801T	CORE	Advanced Sociological Theories	5	T	25	75
A070802T	CORE	Methods and Techniques in Social Research	5	T	25	75
A070803T	CORE	Sociology of Rural life in India	5	T	25	75
A070804T	THIRD ELECTIVE (Generic Elective) (Select any one)	Computer Application in Social Research	5	T	25	75
A070805T		Introduction to Social Work	5	T	25	75
A070806T		Industrial Psychology	5	T	25	75

A070807T		Introduction to Human Resource Management	5	T	25	75
A070808P	FOURTH ELECTIVE (Subject Elective) (Select any one)	Project presentation on Contemporary Indian Society and Culture.	5	P	50	50
A070809P		Project Presentation on Issues and Problems of Indian Society.	5	P	50	50
SEMESTER III (YEAR II)						
A070901T	CORE	Modern Sociological Theories	5	T	25	75
A070902T	CORE	Perspective on Indian Sociology	5	T	25	75
A070903T	CORE	Sociology of Deviance	5	T	25	75
A070904T	FIFTH ELECTIVE (Subject Elective) (Select any one)	Sociology of Gender	5	T	25	75
A070905T		Media, Culture and Society	5	T	25	75
A070906T		Political Sociology	5	T	25	75
A070907T		Globalization and Society	5	T	25	75
A070908P	SIXTH ELECTIVE (Subject Elective) (Select any one)	Project Presentation on Sociology of Environment	5	P	50	50
A070909P		Project Presentation on SPSS or Other Software used in Social Research	5	P	50	50
SEMESTER IV (YEAR II)						
A071001T	CORE	Theoretical Perspectives in Sociology	5	T	25	75
A071002T	CORE	Sociology of Social Change	5	T	25	75
A071003T	SEVENTH ELECTIVE (Subject Elective) (Select any one)	Industrial Sociology	5	T	25	75
A071004T		Social Demography	5	T	25	75
A071005T		Social Statistics	5	T	25	75
A071006T		Science, Technology and Society	5	T	25	75
A071007P	RESEARCH PROJECT/ DISSERTATION	Major Research Project/ Dissertation	10	P	50	50



DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the

Program: M.A. Subject: SOCIOLOGY (Campus & College)

Structure of Syllabus Developed by				
	Name of BoS Convener/BoS Member	Designation	Department	College/ University
1.	Prof. Anup Kumar	Convener (Campus)	Sociology	Dr. Rammanohar Lohia Avadh University, Ayodhya
2.	Prof. Anil Kumar Srivastava	Convener (College)	Sociology	J.N.M.P.G. College, Barabanki

Course Code		Course Title	Credits	T/P	Evaluation	
A	B				CIE	ETE
A	B	C	D	E	F	G
SEMESTER I (YEAR I)						
A070701T	CORE	Classical Sociological Theories	5	T	25	75
A070702T	CORE	Methodology of Social Research	5	T	25	75
A070703T	CORE	Sociology of Development and Planning	5	T	25	75
A070704T	FIRST ELECTIVE (Subject Elective) (Select any one)	Sociology of Culture	5	T	25	75
A070705T		Indian Social Thinkers	5	T	25	75
A070706T		Sociology of Social Movements	5	T	25	75
A070707T		Sociology of Information Society	5	T	25	75
A070708P	SECOND ELECTIVE (Subject Elective) (Select any one)	Project Presentation on Urban Sociology	5	P	50	50
A070709P		Project Presentation on Tribal Studies	5	P	50	50
SEMESTER II (YEAR I)						
A070801T	CORE	Advanced Sociological Theories	5	T	25	75
A070802T	CORE	Methods and Techniques in Social Research	5	T	25	75
A070803T	CORE	Sociology of Rural life in India	5	T	25	75
A070804T	THIRD ELECTIVE (Generic Elective) (Select any one)	Computer Application in Social Research	5	T	25	75
A070805T		Introduction to Social Work	5	T	25	75
A070806T		Industrial Psychology	5	T	25	75

A070807T		Introduction to Human Resource Management	5	T	25	75
A070808P	FOURTH ELECTIVE (Subject Elective) (Select any one)	Project presentation on Contemporary Indian Society and Culture.	5	P	50	50
A070809P		Project Presentation on Issues and Problems of Indian Society.	5	P	50	50
SEMESTER III (YEAR II)						
A070901T	CORE	Modern Sociological Theories	5	T	25	75
A070902T	CORE	Perspective on Indian Sociology	5	T	25	75
A070903T	CORE	Sociology of Deviance	5	T	25	75
A070904T	FIFTH ELECTIVE (Subject Elective) (Select any one)	Sociology of Gender	5	T	25	75
A070905T		Media, Culture and Society	5	T	25	75
A070906T		Political Sociology	5	T	25	75
A070907T		Globalization and Society	5	T	25	75
A070908P	SIXTH ELECTIVE (Subject Elective) (Select any one)	Project Presentation on Sociology of Environment	5	P	50	50
A070909P		Project Presentation on SPSS or Other Software used in Social Research	5	P	50	50
SEMESTER IV (YEAR II)						
A071001T	CORE	Theoretical Perspectives in Sociology	5	T	25	75
A071002T	CORE	Sociology of Social Change	5	T	25	75
A071003T	SEVENTH ELECTIVE (Subject Elective) (Select any one)	Industrial Sociology	5	T	25	75
A071004T		Social Demography	5	T	25	75
A071005T		Social Statistics	5	T	25	75
A071006T		Science, Technology and Society	5	T	25	75
A071007P	RESEARCH PROJECT/ DISSERTATION	Major Research Project/ Dissertation	10	P	50	50



DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the Program: M.A., Subject: PSYCHOLOGY

Structure of Syllabus Developed by			
Name of BoS Convener/BoS Member	Designation	Department	College/ University
Prof. Pranay Kumar Tripathi	Convener	Psychology	K.S. Saket P.G. College, Ayodhya
Prof. Shailendra Prasad Pandey	Member	Psychology	Sant Tulsidas P.G. College, Kadipur SultanPur
Prof. Mamta Sharma	Member	Psychology	L.B.S. P.G. College, Gonda
Prof. Rajendra Prasad Singh	Member	Psychology	M.G. K.V. P. Varanasi
Prof. R. N. Singh	Member	Psychology	B.H.U. Varanasi
Prof. O.P. Chaudhari	Member	Psychology	Shri Agrasen P.G. College Varanasi
Prof. Jagdish Singh	Member	Psychology	T.D. College Jaunpur
Prof. Udyan Mishra	Member	Psychology	L. B. S. P. G. College, Varanasi

Course Code		Course Title	Credits	T/P	Evaluation	
					CIE	ETE
A	B	C	D	E	F	G
SEMESTER I (YEAR I)						
A090701T	CORE	Foundations of Cognitive Psychology	5	T	25	75
A090702T	CORE	Research Methodology	5	T	25	75
A090703T	CORE	Classical Theories of Personality	5	T	25	75
A090704T	FIRST ELECTIVE (Subject Elective) (Select any one)	Biological Basis of Behaviour	5	T	25	75
A090705T		History of Psychology	5	T	25	75
A090706P	SECOND ELECTIVE (Subject Elective) (Select any one)	Practical	5	P	50	50
A090707P		Field Visit/ Project Presentation	5	P	50	50
SEMESTER II (YEAR I)						
A090801T	CORE	Cognitive Processes	5	T	25	75
A090802T	CORE	Experimental Design and Statistics	5	T	25	75
A090803T	CORE	Modern Theories of Personality	5	T	25	75
A090804T	THIRD ELECTIVE (Generic Elective) (Select any one)	Environmental Psychology	5	T	25	75
A090805T		Health Psychology	5	T	25	75

A090806P	FOURTH ELECTIVE	Practical	5	P	50	50
A090807P	(Subject Elective) (Select any one)	Industrial Training/ Project Presentation	5	P	50	50
SEMESTER III (YEAR II)						
A090901T	CORE	Experimental Social Psychology	5	T	25	75
A090902T	CORE	Psychological Assessment	5	T	25	75
A090903T	CORE	Mental Disorders	5	T	25	75
A090904T	FIFTH ELECTIVE	Clinical Psychology	5	T	25	75
A090905T	(Subject Elective) (Select any one)	Organizational Behaviour	5	T	25	75
A090906P	SIXTH ELECTIVE	Practical/Study Tour	5	P	50	50
A090907P	(Subject Elective) (Select any one)	Project presentation/Test Construction	5	P	50	50
SEMESTER IV (YEAR II)						
A091001T	CORE	Applied Social Psychology	5	T	25	75
A091002T	CORE	Psychological Measurement	5	T	25	75
A091003T	SEVENTH ELECTIVE	Psychotherapeutic Techniques	5	T	25	75
A091004T	(Subject Elective) (Select any one)	Human Resource Management	5	T	25	75
A091005P	RESEARCH PROJECT/ DISSERTATION	Major Research Project/ Dissertation	10	P	50	50



DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the Program: M.A., Subject:- HINDI (हिन्दी)

Structure of Syllabus Developed by			
Name of BoS Convener/ BoS Member	Designation	Department	College/ University
izkO MkWO jk/ks';ke fllag	fgUnh fo'k;&l;td	Hindi	KNIPSS, Sultanpur

Course Code		Course Title	Credits	T/P	Evaluation	
A	B	C	D	E	CIE	ETE
SEMESTER I (YEAR I)						
A010701T	CORE	fgUnh lkgR; dk bfrgk l ¼vkvndky l jhfrdky½	5	T	25	75
A010702T	CORE	HkfDrdkyhu fgUnh dkO; ¼dchj] tk;l] rgylnkl] lwjnk l½	5	T	25	75
A010703T	CORE	Hkkjrh; dkO; 'kkL= ,oa izeq[k fl)kr	5	T	25	75
A010704T	FIRST ELECTIVE (Subject Elective)	vk/kqfud fgUnh dFkk lkgR;	5	T	25	75
A010705T	(Select any one)	vk/kqfud fgUnh ds fofo/k x :i	5	T	25	75
A010706P	SECOND ELECTIVE (Subject Elective)	Lo; ds ;k=ko`Ùk@ fjikrkZt@ fdlh ys[kd ds lFk lkkRdkj vFkok lalj.k vkn ij U;wure 8000 'kCnk esa ys[ku	5	P	50	50
A010707P	(Select any one)	ifj;ltuk izLrqfr ¼vkvndky l e;/dky ds fdlh dfo] ys[kd ;k jpuk l lEcfU/kr½	5	P	50	50
SEMESTER II (YEAR I)						
A010801T	CORE	jhfrdkyhu fgUnh dkO; ¼fcgkj] nso] efrjke] ?kukuUn½	5	T	25	75
A010802T	CORE	vk/kqfud fgUnh dkO; ¼HkkjrsUnq l Nk;kokn ;x rd½	5	T	25	75
A010803T	CORE	fgUnh lkgR; dk bfrgk l ¼vk/kqfud dky½	5	T	25	75
A010804T	THIRD ELECTIVE (Generic Elective)	ik'pkR; dkO; 'kkL= ,oa izeq[k okn	5	T	25	75
A010805T	(Select any one)	fgUnh i=dkfjrk ,oa tulapkj	5	T	25	75
A010806T	FOURTH ELECTIVE	fgUnh nfyf foe'k dk lekftd ifjizs[;	5	T	25	75

A010807T	(Subject Elective) (Select any one)	vkfnoklh foe'k dk lkekftd ifjizs;	5	T	25	75
SEMESTER III (YEAR II)						
A010901T	CORE	vk/kqfud fgUnh dkO; ¼izxfrokn l v ru½	5	T	25	75
A010902T	CORE	Hkk"kk foKku ,oa fgUnh Hkk"kk dk fodkl	5	T	25	75
A010903T	CORE	Hkkjrh; l kfgR;&vo/kkj.kk] fl)ar o p;fur jpuk,i	5	T	25	75
A010904T	FIFTH ELECTIVE	fgUnh l kfgR; vkj fl usek	5	T	25	75
A010905T	(Subject Elective) (Select any one)	fgUnh l kfgR; l l EcfU/kr ifj;ktuk izLrqfr ¼vk/kqfud dky ds fdlh dfo] ys[kd ;k mldh jpuk l l EcfU/kr½	5	T	25	75
A010906P	SIXTH ELECTIVE	U;wure 5 l feukj ,o mldh izLrqfr	5	P	50	50
A010907P	(Subject Elective) (Select any one)	vfLerk foe'kZ ,oa L=h ys[ku dk lkekftd] l kaL`frd ifjizs;	5	P	50	50
SEMESTER IV (YEAR II)						
A011001T	CORE	vk/kqfud fgUnh vky;ypuk&ekU;rk, ,o izeq[k okn	5	T	25	75
A011002T	CORE	fgUnh ukVd ,o fuca/k	5	T	25	75
A011003T	SEVENTH ELECTIVE (Subject Elective) (Select any one)	dchj] l jnk l] rqylhnl] t;'kadj iz lkn ,oa /lifey ¼fdlh ,d jpukdkj dk fo'ks'k v/; ;u½	5	T	25	75
A011004T		fdUuj foe'kZ dk lkekftd ifjizs;	5	T	25	75
A011005P	RESEARCH PROJECT/ DISSERTATION	foHkx }kjk fu/kkfjr fo'k; ij y?kq'kks/k izcU/k ,oa rn~vk/kkfjr lk{kRdkjA	10	P	50	50



DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the Program: M.A., Subject: POLITICAL SCIENCE

Structure of Syllabus Developed by			
Name of BoS Convener/ BoS Member	Designation	Department	College/ University
Prof. Atul Kumar Singh	Convener	Political Science	S.L.B.S. Degree College, Gonda

Course Code		Course Title	Credits	T/P	Evaluation	
					CIE	ETE
A	B	C	D	E	F	G
SEMESTER I (YEAR I)						
A060701T	CORE	History of Western Political Thoughts – I (Plato to Burke)	5	T	25	75
A060702T	CORE	Comparative Politics – I	5	T	25	75
A060703T	CORE	Indian Government and Politics – I	5	T	25	75
A060704T	FIRST ELECTIVE (Subject Elective) (Select any one)	Public Administration	5	T	25	75
A060705T		Dynamics of Indian Politics	5	T	25	75
A060706P	SECOND ELECTIVE (Subject Elective) (Select any one)	Seminar/ Project Presentation on Theories of Social Change, Social Movement and Revolution	5	P	50	50
A060707P		Seminar/ Project Presentation on Feminism and Gender Justice	5	P	50	50
SEMESTER II (YEAR I)						
A060801T	CORE	History of Western Political Thoughts – II (Bentham to Present Day)	5	T	25	75
A060802T	CORE	Comparative Politics – II	5	T	25	75
A060803T	CORE	Indian Government and Politics – II	5	T	25	75
A060804T	THIRD ELECTIVE (Generic Elective) (Select any one)	Indian Administration	5	T	25	75
A060805T		Human Rights in India	5	T	25	75
A060806P	FOURTH ELECTIVE (Subject Elective) (Select any one)	Seminar/ Project Presentation on Public Policy	5	P	50	50
A060807P		Seminar/ Project Presentation on Contemporary Political Issues in India	5	P	50	50

SEMESTER III (YEAR II)						
A060901T	CORE	Political Thinkers of Ancient India	5	T	25	75
A060902T	CORE	Contemporary Political Ideologies	5	T	25	75
A060903T	CORE	International Politics – I	5	T	25	75
A060904T	FIFTH ELECTIVE (Subject Elective) (Select any one)	International Organization	5	T	25	75
A060905T		India's Foreign Policy	5	T	25	75
A060906P	SIXTH ELECTIVE (Subject Elective) (Select any one)	Seminar/ Project Presentation on Democracy and Development Process in India	5	P	50	50
A060907P		Seminar/ Project Presentation on Political Sociology	5	P	50	50
SEMESTER IV (YEAR II)						
A061001T	CORE	Political Thinkers of Modern India	5	T	25	75
A061002T	CORE	International Politics – II	5	T	25	75
A061003P	SEVENTH ELECTIVE (Subject Elective) (Select any one)	State Politics of India (With special reference to UP)	5	P	50	50
A061004P		Local Self Government	5	P	50	50
A061005P		Research Methods in Social Science	5	P	50	50
A061006P	RESEARCH PROJECT/ DISSERTATION	Dissertation	10	P	50	50



DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the Program: M.A., Subject: POLITICAL SCIENCE

Structure of Syllabus Developed by			
Name of BoS Convener/ BoS Member	Designation	Department	College/ University
Prof. Atul Kumar Singh	Convener	Political Science	S.L.B.S. Degree College, Gonda

Course Code		Course Title	Credits	T/P	Evaluation	
					CIE	ETE
A	B	C	D	E	F	G
SEMESTER I (YEAR I)						
A060701T	CORE	History of Western Political Thoughts – I (Plato to Burke)	5	T	25	75
A060702T	CORE	Comparative Politics – I	5	T	25	75
A060703T	CORE	Indian Government and Politics – I	5	T	25	75
A060704T	FIRST ELECTIVE (Subject Elective) (Select any one)	Public Administration	5	T	25	75
A060705T		Dynamics of Indian Politics	5	T	25	75
A060706P	SECOND ELECTIVE (Subject Elective) (Select any one)	Seminar/ Project Presentation on Theories of Social Change, Social Movement and Revolution	5	P	50	50
A060707P		Seminar/ Project Presentation on Feminism and Gender Justice	5	P	50	50
SEMESTER II (YEAR I)						
A060801T	CORE	History of Western Political Thoughts – II (Bentham to Present Day)	5	T	25	75
A060802T	CORE	Comparative Politics – II	5	T	25	75
A060803T	CORE	Indian Government and Politics – II	5	T	25	75
A060804T	THIRD ELECTIVE (Generic Elective) (Select any one)	Indian Administration	5	T	25	75
A060805T		Human Rights in India	5	T	25	75
A060806P	FOURTH ELECTIVE (Subject Elective) (Select any one)	Seminar/ Project Presentation on Public Policy	5	P	50	50
A060807P		Seminar/ Project Presentation on Contemporary Political Issues in India	5	P	50	50

SEMESTER III (YEAR II)						
A060901T	CORE	Political Thinkers of Ancient India	5	T	25	75
A060902T	CORE	Contemporary Political Ideologies	5	T	25	75
A060903T	CORE	International Politics – I	5	T	25	75
A060904T	FIFTH ELECTIVE (Subject Elective) (Select any one)	International Organization	5	T	25	75
A060905T		India's Foreign Policy	5	T	25	75
A060906P	SIXTH ELECTIVE (Subject Elective) (Select any one)	Seminar/ Project Presentation on Democracy and Development Process in India	5	P	50	50
A060907P		Seminar/ Project Presentation on Political Sociology	5	P	50	50
SEMESTER IV (YEAR II)						
A061001T	CORE	Political Thinkers of Modern India	5	T	25	75
A061002T	CORE	International Politics – II	5	T	25	75
A061003P	SEVENTH ELECTIVE (Subject Elective) (Select any one)	State Politics of India (With special reference to UP)	5	P	50	50
A061004P		Local Self Government	5	P	50	50
A061005P		Research Methods in Social Science	5	P	50	50
A061006P	RESEARCH PROJECT/ DISSERTATION	Dissertation	10	P	50	50



DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the Program: M.A., Subject: POLITICAL SCIENCE

Structure of Syllabus Developed by			
Name of BoS Convener/ BoS Member	Designation	Department	College/ University
Prof. Atul Kumar Singh	Convener	Political Science	S.L.B.S. Degree College, Gonda

Course Code		Course Title	Credits	T/P	Evaluation	
					CIE	ETE
A	B	C	D	E	F	G
SEMESTER I (YEAR I)						
A060701T	CORE	History of Western Political Thoughts – I (Plato to Burke)	5	T	25	75
A060702T	CORE	Comparative Politics – I	5	T	25	75
A060703T	CORE	Indian Government and Politics – I	5	T	25	75
A060704T	FIRST ELECTIVE (Subject Elective) (Select any one)	Public Administration	5	T	25	75
A060705T		Dynamics of Indian Politics	5	T	25	75
A060706P	SECOND ELECTIVE (Subject Elective) (Select any one)	Seminar/ Project Presentation on Theories of Social Change, Social Movement and Revolution	5	P	50	50
A060707P		Seminar/ Project Presentation on Feminism and Gender Justice	5	P	50	50
SEMESTER II (YEAR I)						
A060801T	CORE	History of Western Political Thoughts – II (Bentham to Present Day)	5	T	25	75
A060802T	CORE	Comparative Politics – II	5	T	25	75
A060803T	CORE	Indian Government and Politics – II	5	T	25	75
A060804T	THIRD ELECTIVE (Generic Elective) (Select any one)	Indian Administration	5	T	25	75
A060805T		Human Rights in India	5	T	25	75
A060806P	FOURTH ELECTIVE (Subject Elective) (Select any one)	Seminar/ Project Presentation on Public Policy	5	P	50	50
A060807P		Seminar/ Project Presentation on Contemporary Political Issues in India	5	P	50	50

SEMESTER III (YEAR II)						
A060901T	CORE	Political Thinkers of Ancient India	5	T	25	75
A060902T	CORE	Contemporary Political Ideologies	5	T	25	75
A060903T	CORE	International Politics – I	5	T	25	75
A060904T	FIFTH ELECTIVE (Subject Elective) (Select any one)	International Organization	5	T	25	75
A060905T		India's Foreign Policy	5	T	25	75
A060906P	SIXTH ELECTIVE (Subject Elective) (Select any one)	Seminar/ Project Presentation on Democracy and Development Process in India	5	P	50	50
A060907P		Seminar/ Project Presentation on Political Sociology	5	P	50	50
SEMESTER IV (YEAR II)						
A061001T	CORE	Political Thinkers of Modern India	5	T	25	75
A061002T	CORE	International Politics – II	5	T	25	75
A061003P	SEVENTH ELECTIVE (Subject Elective) (Select any one)	State Politics of India (With special reference to UP)	5	P	50	50
A061004P		Local Self Government	5	P	50	50
A061005P		Research Methods in Social Science	5	P	50	50
A061006P	RESEARCH PROJECT/ DISSERTATION	Dissertation	10	P	50	50



DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the Program: M.A., Subject: ECONOMICS

Structure of Syllabus Developed by			
Name of BoS Convener/ BoS Member	Designation	Department	College/ University
Dr. Abhai Kumar Srivastava	Professor & Convenor	Economics	Shri L.B.S. Degree College Gonda
Dr. Jitendra Bahadur Pal	Professor & Member	Economics	Shri L.B.S. Degree College Gonda

Course Code		Course Title	Credits	T/P	Evaluation	
					CIE	ETE
A	B	C	D	E	F	G
SEMESTER I (YEAR I)						
A080701T	CORE	Micro Economic Analysis	5	T	25	75
A080702T	CORE	Problems of Indian Economy: Basic Issues	5	T	25	75
A080703T	CORE	Statistical Methods	5	T	25	75
A080704T	FIRST ELECTIVE (Subject Elective) (Select any one)	Labour Economics	5	T	25	75
A080705T		Infrastructure Development of India	5	T	25	75
A080706P	SECOND ELECTIVE (Subject Elective) (Select any one)	Project Presentation on the Problem of Indian Economy	5	P	50	50
A080707P		Project Presentation on Unemployment Problem of Labour	5	P	50	50
SEMESTER II (YEAR I)						
A080801T	CORE	Advanced Economic Theory	5	T	25	75
A080802T	CORE	Indian Economy: Industrial and External Sector	5	T	25	75
A080803T	CORE	Quantitative Methods	5	T	25	75
A080804T	THIRD ELECTIVE (Generic Elective) (Select any one)	Industrial Economics	5	T	25	75
A080805T		Environmental Economics	5	T	25	75
A080806P	FOURTH ELECTIVE (Subject Elective) (Select any one)	Project Presentation on Indian M.S.M.E.	5	P	50	50
A080807P		Project Presentation on Human Resource Development in India	5	P	50	50
SEMESTER III (YEAR II)						
A080901T	CORE	Monetary Economics	5	T	25	75
A080902T	CORE	International Economics	5	T	25	75

A080903T	CORE	Economics of Growth & Development	5	T	25	75
A080904T	FIFTH ELECTIVE (Subject Elective)	Agriculture Economics	5	T	25	75
A080905T	(Select any one)	History of Economic Thoughts	5	T	25	75
A080906P	SIXTH ELECTIVE (Subject Elective)	Project Presentation on Indian Foreign Trade and It's challenges	5	P	50	50
A080907P	(Select any one)	Project Presentation on Economic Policy of Rural Development	5	P	50	50
SEMESTER IV (YEAR II)						
A081001T	CORE	Macro Economic Analysis	5	T	25	75
A081002T	CORE	Public Economics	5	T	25	75
A081003T	SEVENTH ELECTIVE (Subject Elective)	Modern International Economics	5	T	25	75
A081004T	(Select any one)	Demography	5	T	25	75
A081005P	RESEARCH PROJECT/ DISSERTATION	Dissertation	10	P	50	50



DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the Program: M.A., Subject: EDUCATION

Structure of Syllabus Developed by			
Name of BoS Convener/ BoS Member	Designation	Department	College/ University
Prof. Shiv Sharan Shukla	Convener	Education	S.L.B.S.Degree College Gonda
Prof. B.K. Gupta	Member	Education	J.N.M. P.G. College Barabanki
Prof. Aditya Narayan Thripathi	Member	Education	S.T.D.P.G. College, Kadipur, Sultanpur

Course Code		Course Title	Credits	T/P	Evaluation	
					CIE	ETE
A	B	C	D	E	F	G
SEMESTER I (YEAR I)						
E010701T	CORE	Philosophical Bases of Education (Western Philosopher)	5	T	25	75
E010702T	CORE	Sociological Bases of Education	5	T	25	75
E010703T	CORE	Methodology of Educational Research	5	T	25	75
E010704T	FIRST ELECTIVE (Subject Elective) (Select any one)	History of Indian Education	5	T	25	75
E010705T		Measurement and Evaluation in Education	5	T	25	75
E010706P	SECOND ELECTIVE (Subject Elective) (Select any one)	Prepare and Presentation of Synopsis	5	P	50	50
E010707P		Prepare and Presentation of Tools	5	P	50	50
SEMESTER II (YEAR I)						
E010801T	CORE	Psychological Bases of Education	5	T	25	75
E010802T	CORE	Educational Administration and Management	5	T	25	75
E010803T	CORE	Comparative Education	5	T	25	75
E010804T	THIRD ELECTIVE (Generic Elective) (Select any one)	Population Education	5	T	25	75
E010805T		Environmental Education	5	T	25	75
E010806P	FOURTH ELECTIVE (Subject Elective) (Select any one)	Psychological Tests	5	P	50	50
E010807P		Psychological Experiment	5	P	50	50
SEMESTER III (YEAR II)						

E010901T	CORE	Special Education	5	T	25	75
E010902T	CORE	Educational Guidance and Counseling	5	T	25	75
E010903T	CORE	Indian Philosophies of Education	5	T	25	75
E010904T	FIFTH ELECTIVE	Educational Technology	5	T	25	75
E010905T	(Subject Elective) (Select any one)	Information and Communication Technology	5	T	25	75
E010906P	SIXTH ELECTIVE	Study Tour	5	P	50	50
E010907P	(Subject Elective) (Select any one)	Project Presentation/Test Construction	5	P	50	50
SEMESTER IV (YEAR II)						
E011001T	CORE	Teacher Education	5	T	25	75
E011002T	CORE	Economics of Education	5	T	25	75
E011003T	SEVENTH ELECTIVE	Curriculum Development	5	T	25	75
E011004T	(Subject Elective) (Select any one)	Distance Education	5	T	25	75
E011005P	RESEARCH PROJECT/ DISSERTATION	Major Research Project/ Dissertation	10	P	50	50



DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the Program: M.A./M.Sc./M.Com, Subject: Geography

Structure of Syllabus Developed by			
Name of BoS Convener/ BoS Member	Designation	Department	College/ University

Course Code		Course Title	Credits	T/P	Evaluation	
A	B	C	D	E	CIE	ETE
SEMESTER I (YEAR I)						
	CORE	Core Subject Paper	5	T	25	75
	CORE	Core Subject Paper	5	T	25	75
	CORE	Core Subject Paper	5	T	25	75
	FIRST ELECTIVE (Select any one)	Subject Elective	5	T	25	75
		Subject Elective	5	T	25	75
	SECOND ELECTIVE (Select any one)	Practical/ Field Visit/ Project Presentation	5	P	50	50
		Practical/ Field Visit/ Project Presentation	5	P	50	50
SEMESTER II (YEAR I)						
	CORE	Core Subject Paper	5	T	25	75
	CORE	Core Subject Paper	5	T	25	75
	CORE	Core Subject Paper	5	T	25	75
	THIRD ELECTIVE (Select any one)	Generic Elective	5	T/P	50	50
		Generic Elective	5	T/P	50	50
	FOURTH ELECTIVE (Select any one)	Practical / Industrial Training/ Project Presentation	5	P	50	50
		Practical / Industrial Training/ Project Presentation	5	P	50	50
SEMESTER III (YEAR II)						
	CORE	Core Subject Paper	5	T	25	75
	CORE	Core Subject Paper	5	T	25	75
	CORE	Core Subject Paper	5	T	25	75
	FIFTH ELECTIVE	Subject Elective	5	T	25	75

Signature
25/05/23

Signature

	(Select any one)	Subject Elective	5	T	25	75
	SIXTH ELECTIVE	Practical/ Project presentation	5	P	50	50
	(Select any one)	Practical/ Project presentation	5	P	50	50
SEMESTER IV (YEAR II)						
	CORE	Core Subject Paper	5	T	25	75
	CORE	Core Subject Paper	5	T	25	75
	SEVENTH ELECTIVE	Subject Elective/ Practical Elective	5	T/P	25/50	75/50
	(Select any one)	Subject Elective/ Practical Elective	5	T/P	25/50	75/50
	RESEARCH PROJECT/ DISSERTATION	Major Research Project/ Dissertation	10	P	50	50

NOTE:

- Do not mark any Code/information in Column-A, it will be indorsed by the University.
- T/P in Column-E stands for Theory/Practical.
- CIE in Column-F stands for 'Continuous Internal Evaluation' and depicts the maximum Internal marks. Respective Examination will be conducted by subject teacher.
- ETE in Column-G stands for 'External Evaluation' and depicts the maximum external marks. Respective Examination will be conducted by the University.
- Column-B defines the nature of course/paper. The word CORE herein stands for Compulsory Subject Paper.
- Column-D depicts the credits assigned for the corresponding course/paper.
- First Elective: It will be a Subject Elective. Students may select one of the two subject papers under this category.
- Second Elective: It will designate a Practical Paper or equivalently a Field Visit or Project Presentation. In case of Field Visit, student is required to submit a detailed report of the visit for the purpose of evaluation. The report should include the observational features and benefits of the visit. In case of Project Presentation, the student may be assigned to go for a survey/practical or theoretical project/assignment or seminar with presentation.
- Third Elective: It will be a Generic Elective. The student may study or receive training of the any subject of his interest (depends on the availability in his institution of enrollment). The Generic elective paper will be evaluated in two parts. First part (50 marks) would be a continuous Internal evaluation (03 tests 20+20+10 marks) whereas the examination and evaluation of the second part (50 marks) would be arranged by the college itself (01 exam).
- Fourth Elective: It will accommodate a practical paper or industrial Training or Project Presentation. In case of industrial Training, student may be allowed for the summer training and is required to submit a detailed training report including training certificate for the evaluation.
- Fifth Elective: It will be a Subject Elective. Students may select one of the two subject papers under this category.
- Sixth Elective: It will be a Practical Paper or equivalently a Project Presentation based on Survey/ Seminar/ Assignment. In case of Project Presentation, student has to submit an exhaustive report on respective topic and to face an open presentation for the evaluation.
- Seventh Elective: It will be a Major Research Project or equivalently a research-oriented Dissertation on the allotted topic. The student straight away will be awarded 05 credits if he publishes a research paper on the topic of Research Project or Dissertation.
- Methodology for the practical examination and examiner appointment will be governed by the Clause-13 of the NEP Guideline of RMLAU dated 27-06-2022 except the marks distribution for continuous internal evaluation and external evaluation.



 25/08/23



DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the

Program: M.A./M.Sc., Subject: GEOGRAPHY (College & Campus)

Structure of Syllabus Developed by			
Name of BoS Convener/ BoS Member	Designation	Department	College/University
Prof. Anju Singh	Head & Member	Geography	Udal Pratap Autonomous college Varanasi
Prof. Shyam Bahadur Singh	Professor & Convener (College)	Geography	Sant Tulsidas P.G. College Kadipur, Sultanpur

Course Code		Course Title	Credits	T/P	Evaluation	
A	B	C	D	E	CIE	ETE
SEMESTER I (YEAR I)						
A110701T	CORE	History of Geographic Thought	5	T	25	75
A110702T	CORE	Regional Development & Planning	5	T	25	75
A110703T	CORE	Geography of Resources	5	T	25	75
A110704T	First Elective (Subject Elective) (Select any one)	Bio Geography	5	T	25	75
A110705T		Population Geography	5	T	25	75
A110706P	Second Elective (Subject Elective) (Select any one)	Field Training (Tour Report)	5	P	50	50
A110707P		Geographic Information System (GIS)	5	P	50	50
SEMESTER II (YEAR I)						
A110801T	CORE	India : Physical Geography	5	T	25	75
A110802T	CORE	Economic Geography	5	T	25	75
A110803T	CORE	Environmental Geography	5	T	25	75
A110804T	Third Elective (Generic Elective) (Select any one)	General Geography	5	T	25	75
A110805T		Disaster Management	5	T	25	75
A110806P	Fourth Elective (Subject Elective) (Select any one)	Advance Quantitative Techniques	5	P	50	50
A110807P		Remote Sensing	5	P	50	50

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Shyam Bahadur Singh

SEMESTER III (YEAR II)						
A110901T	CORE	Advance Geomorphology	5	T	25	75
A110902T	CORE	Advance Climatology	5	T	25	75
A110903T	CORE	Advance Oceanography	5	T	25	75
A110904T	Fifth Elective (Subject Elective) (Select any one)	Rural Geography	5	T	25	75
A110905T		Urban Geography	5	T	25	75
A110906P	Sixth Elective (Subject Elective) (Select any one)	Cartography	5	P	50	50
A110907P		Field Study Report	5	P	50	50
SEMESTER IV (YEAR II)						
A111001T	CORE	Agricultural Geography	5	T	25	75
A111002T	CORE	Political Geography	5	T	25	75
A111003P	Seventh Elective (Subject Elective) (Select any one)	Field Study (Socio-economic Survey)	5	P	50	50
A111004P		Advance Surveying	5	P	50	50
A111005P	Research Project/Dissertation	Major Research Project / Dissertation	10	P	50	50

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA
Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A110701T : Core	Year : First	Semester : First
Course Title : HISTORY OF GEOGRAPHICAL THOUGHT		

- Unit I. Main Regions of Geographical Knowledge ancient times., Periods of the Development of geographic thoughts in ancient India, Cosmogony and cosmology in Ancient India, Main Aspects of Geography in ancient India.
- Unit II. Development of geographical thought during Dark Age; General characteristic of Contribution of Arabs in scientific geography; Al Khwarizmi, Al Masudi, Al Biruni and Ibn Khaldun.
- Unit III. Concepts in geography; Environmental Determinism, Possibilism and Neo-determinism and their present relevance in geography. Development of Dualism in geography; Physical verses Human Geography and Regional verses Systematic Geography.
- Unit IV. Development of Modern Geography: Contributions of German School Humboldt, Ritter, Ratzel, Contribution of French School-Vedal-De-La Balche. Contribution of British School-Meckinder the relevance of "Heartland theory" in present day-Geo-political order.

Books Recommended:

1. Ali, S.M., Arab Geography, AMU., Press, Aligarh.
2. Anuchin, V., Directions in Geography.
3. Bunge, W., Theoretical Geography.
4. Claval, P., Epistemology and History of Geographical Thought, in progress in Human Geography, Vol.4.
5. Dickinson, R.E., The Makers of Modern Geog., London, 1969.
6. Dickinson, R.E., The Making of Modern Geography.
7. Davis, V.K., Conceptual Revolution in Geography.
8. Freeman. T.A., A Hundred Years of Geography: Introduction to Behavioral Geography.
9. Amedas, Douglas, An Introduction to Scientific Reasoning in Geog., John Wiley, 1971.
10. Hartshorne, R., Perspectives on Nature of Geography, Rand MacNally, 1959.
11. Johnstone, R.J., The Future of Geography, Methuen, London, 1988.



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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA
Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A110702T : Core	Year : First	Semester : First
Course Title : REGIONAL DEVELOPMENT & PLANNING		

Unit I.	Concept and nature of Regional Planning, Types of Planning, Principles and Objectives of Regional Planning; Approaches of Regional Planning.
Unit II.	Concept of Regions, Attributes of Region, types of Regions, formal and functional regions, Methods and techniques used in the regionalization of formal and functional regions, Planning Regions in India.
Unit III.	Theories of Regional Development (Albert O. Hirschman, Gunnar Myrdal, John Friedman, W.W. Rostow, Dependency Theory of Environmental issues in Regional Planning.
Unit IV.	Global Economic Block, World Regional Disparities, Regional Imbalances/ Disparities in India- Causes and consequences; Regional Development and Social movement in India.

Books Recommended:

1. Bhat, L.S., 1973, *Regional Planning in India*, Statistical Publishing Society, Calcutta.
2. Chandana, R.C., 2000, *Regional Planning*, Kalyani Publishers Ludhiana.
3. Chand, M., Puri, & V.K., 1983, *Regional Planning in India*, allied Publishers, New Delhi.
4. Friedman, J., & Alonso, W. 1967, *Regional Development and Planning - A Reader*, MIT Press, Cambridge Mass.
5. Glasson, 1980 *Regional Planning*, Hutchinson, London.
6. Glikson, A., 1955, *Regional and Development*, Netherlands, Foundation of International Corrop. London.
7. Mishra, R.P., 1969. *Regional Planning Concepts, Techniques and Politicles*, University of Mysore, Mysore.
8. Mishra, R.P., et al., 1974. *Regional Development and Planning In India*. Institute of Development Studies, Mysore.
9. Rao, V.L.B., 1960. *Regional Planning*, Asia Publishing House, New Delhi.
10. Kant Surya et. al (eds).: *Reinventing Regional Development*, Rawat Publication, Jaipur and New Delhi.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA
Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A110703T : Core	Year : First	Semester : First
Course Title : GEOGRAPHY OF RESOURCES		

- Unit I. Nature, Scope and significance of geography of resources. Definition and concept of natural resources, Classification of resources.
- Unit II. Characteristics of natural resources: Resources conservation and management with reference to land and forest resource.
- Unit III. Water resources-Hydrologic Cycle, Fresh water resources, surface and underground water supplies, problems of water supplies. Marine resources, major fishing grounds of the world, fish distribution and exploitation. India's natural resource: water resource, conservation and management and its utilization.
- Unit IV. Energy resources- Conventional energy resources-coal, petroleum, non-conventional- solar and geothermal energy.

Books Recommended:

1. Alexander, J.W., Economic Geography, New Jersey, 1965.
2. All, S.A., Resources for Future Economic Growth, New Delhi, 1979.
3. Dehends, William, W., The Dynamics of Natural Resource Utilization in D. Meadow (Ed.), Massachusetts, 1972.
4. Duncan, G., Resource Utilization and Conservation, New York, 1975.
5. Earl, D.K., Forest Energy and Economic Development, Oxford, 1975.
6. Ranner, G.T., Conservation of Natural Resources, New York, 1942.
7. Zimmerman, E.W., Introduction of World Resources (edited by H.L. Honker, The Ohio State University, New York, 1964.
8. Zimmermann, E.N., World Resources & Industries, New York.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code :A110704T : First Elective	Year : First	Semester : First
Course Title : BIO GEOGRAPHY		

- Unit I. Meaning and scope of Biogeography, Biogeography and related sciences, Approaches to the study of Biogeography, relevance and significance of Biogeography, environmental factors affecting distribution of flora and faunas.
- Unit II. Soils as an ecological factor, Soil forming factors, Soil components, Soil properties, Soil profile and horizon, Soil erosion and conservation, concept and types of ecosystem.
- Unit III. Biomes with special reference to Tropical rain forests, Tropical Monsoon deciduous forest, Tropical and Temperate grass lands biomes, zoogeographical regions.
- Unit IV. Evolution, Dispersal and distribution of plants, forest conservation in India, wild life conservation in India, Biodiversity, concept types and importance.

Books Recommended:

1. Simmon, I.G., Biogeography: Natural and Cultural, Longman, London 1974.
2. Watts, David, Principles of Biogeography, London.
3. Odum, eugene P., Fundamentals of Ecology, Philadelphia.
4. Newbigin, M.I., Plant and Animal Geography, London.
5. Cloudsley-Thompson, J.L., Terrestrial Environment, London.
6. Allee, W.C., & Schmidt, K.P., Ecological Animal Geography, New York.
7. Jones, R.L., Biogeography: Structure, Process Pattern and Change within a Biosphere.
8. Mathur, M.S., Essentials of Biogeography, New York.
9. Darlington, P., Zoogeography, New York.
10. Huggett, R.J., Fundamentals of Biogeography, Routledge, U.S.A., 1998.
11. Cox, C.B. and More, P.D., Biogeography: An Ecological and Evolutionary Approach, London, 2000.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

**Structure of Syllabus for the
Program: M.A. Subject: Geography**

Course Code : A110705T : First Elective	Year : First	Semester : First
Course Title : POPULATION GEOGRAPHY		

- Unit I.** Nature, Scope, significance, approaches to study Population Geography, recent trends, Sources of population data; The Census, Vital Registration and other Sources, Problems relating to compatability of data, Population distribution and density in the world.
- Unit II.** Population Dynamics: Growth, fertility and mortality measurement, Theories of Growth: Malthusian theory, Social Capillary and demographic transition theory. Migration: Types, determinant and consequences, pattern of international migration. Theories of Migration: Ravenstein and Lee's laws.
- Unit III.** Population Composition/ Characteristics: Sex Composition - measures, determinants and distribution. Declining Sex Ratio, Age Composition: various systems of age groupings, determinants and distribution; Ageing of population, Occupational structure, determinants of work force, types of workers.
- Unit IV.** Population and resources: Over population, Under population, Optimum population, Ackerman's scheme of Population-Resource Regions, population problems with special reference to India: food, housing, unemployment and poverty, population policies, National Population Policy (NPP), 2000.

Books Recommended:

1. Bhende, A.A., & Kanitkar, (2014), Principles of Population Studies, Himalayan Pub. H., Mumbai.
2. Bogue, D.J., Principles of Demography, New York, 1969.
3. Chandna, R.C., Geography of Population: Concepts Determinants and Pattern, Kalyan Pub. Ludhiana, 2014.
4. Clarke, J.I. Population Geography, Oxford, 1981.
5. Coontz, S.H. Population Theories and the Economic Interpretation.
6. Garnier, B.J., Geography of Population, Longman Group Limited, London, 1966.
7. Jones, H.R., A Population Geography, London, 1981.
8. Siddiqui, F.A., Regional Analysis of Population Structure, New Delhi, 1984.
9. Smith, T., Fundamentals of Population Study, New York, 1960.
10. Trewartha, G.T., A Geography of Population: World pattern, New York, 1969.
11. Wood, R. Population Analysis in Geography, Longman, London, 1979.
12. Zelinsky, W.A., Prolong to Population Geography. Prentice Hall, New Jersey, 1966.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

**Structure of Syllabus for the
Program: M.A. Subject: Geography**

Course Code : A110706P : Second Elective	Year : First	Semester : First
Course Title : FIELD TRAINING (TOUR REPORT)		

The student of MA./M. Sc. (Final) III Semester are required to study and submit their tour reports for evaluation and viva voce examination. The duration of the main fieldwork will be upto two weeks. The fieldwork will cover the following region/regions of India assigned by the department during the academic year. The class room teaching would include preliminaries of socio-economic and environmental surveys to equip the students for the field work and tour report.

1. The Deccan Region.
2. The Konkan/Malabar Coast
3. The Sunder Ban Delta
4. The Mahanadi Delta
5. The Krishna Delta
6. The Cauvery Delta
7. The North Eastern States
8. The North/North Western States
9. The Central India

The T.A. and D.A. of the staff accompanying with students will be paid by the institution.

Books Recommended:

1. Singh, R.L., (Ed.) India - A Regional Study.
2. Spate, O.H.K., India - A Regional Geography.
3. Wadia, D.N., Geology of India.
4. M.S. Krishna, Geology of India.
5. Ray and Chaudhary, Soils of India.
6. Ahmad, E., Coastal Geomorphology.
7. Ahmad, E., Some Aspects of Indian Geography.

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**Structure of Syllabus for the
Program: M.A. Subject: Geography**

Course Code : A110707P ; Second Elective	Year : First	Semester : First
Course Title : GEOGRAPHIC INFORMATION SYSTEM (GIS)		

Fundamentals of GIS

Introduction of GIS: Definition, information technology in geography, history and development in GIS, components of GIS, advantages of GIS over traditional techniques. Application of GIS in geographical studies.

Geographic data - human cognition of the spatial world, maps and other representation of the world. Types of information in a digital map: scale projection and georeferencing.

Spatial Data - Geographic data and information, spatial - non-spatial data. GIS data formats, raster and vector data, their merits and demerits.

Lab Work:

Lab I: Introduction to Arc View's Modular Structure

Task Set 1 : Basic software and operating system concept, Task Set 2: Introduction to Arc View

Lab II: Projection and Cartography

Task Set 1: Basic concepts of projection, Task Set 2: Concept of the theme in Arc View, Task set 3: Cartographic design concepts

Lab III: Vectors Data Model:

Task Set 1: The vector data model: points. Task Set 2: The Vector data model: Lines and Polygons. Task Set 3: Joining tabular data to spatial data. Task Set 4: Creating Visualization

Lab IV: Digitizing and Data Automation

Task Set 1: Digitizing In Arc View

Task Set 2: Creating a map.

Task Set 3: Creating a table and entering data

Lab V: Geo-coding: Matching addresses with locations

Task Set 1: Gep-coding

Lab VI: Spatial Analysis

Task Set 1: Classification

Task Set 2: Distance measure and Buffers

Books Recommended:

1. Cromley, R.G., Digital Cartography, Prentice Hall, N. Jersey, 1992
2. Fraser Taylor, D.R., "Geographical Information System", Pergmon Press, U.K., 1991.
3. Maquire, D.J., Good Child, M.F., and Rhind, D.W., "Geographical Information Systems: Principles and Application", Taylor and Francis Publication Washington, 1991.
4. Monmonier, M.S., Computer Assisted Cartography: Principles and Prospects, P. Hall, New Jersey, 1982.
5. Peucker, D.J. and Markle, D.F., "Introductory Reading in Geographical Information System", Taylor and Frands Publication, Washington, 1990.
6. Snahab Fazal, GIS Basics, New age International Publisher.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A110801T : Core	Year : First	Semester : Second
Course Title : INDIA: PHYSICAL GEOGRAPHY		

- Unit I. Physiography: Stratigraphy of India- A Brief Review. Bases of Physiographic Divisions of India; Evolution of Extrapeninsula: Its Geological Structure, Relief and the Evidences Regarding its Present Day Evolution; Peninsula: Structure and Relief; Indo-Gangetic Plain: Evolution, Structure and Relief; Coasts: Western Coast and Eastern Coast.
- Unit II. Drainage: Evolution of Extra-peninsular Drainage- A Critical study of Indo-Brahm Theory: The Ganga River System, System and Pattern of Peninsular Drainage. The Godavari River System; differences between the Himalayan and Peninsular Drainage.
- Unit III. Climate: Origin and Mechanisms of Indian Monsoon- A Critical Review of Classical and Modern Views Regarding its Origin: Effects of El-Nino on Indian Monsoon. Koppen's and Thornthwaite classification of Climate.
- Unit IV. Soils and Forests: Problems of Soil- Soil Erosion and Conservation; Saline and Alkaline Soils- their measures of reclamation; Problems of Indian Forestry; Forest Development Programs.

Books Recommended:

1. Spate, O.H.K., & Learmonth, A.T.A., India & Pakistan, London.
2. Puri, G. S., Indian forest Ecology, New Delhi.
3. Ray Chaudhary, S.P. Land and soil, New Delhi.
4. The Gazetteer of India Vol.1.
5. Krishnan, M.S., Geology of India and Burma
6. Das, P.K., The Monsoon, New Delhi
7. Wadia, D.N., Geology of India, London.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A110802T : Core	Year : First	Semester : Second
Course Title : ECONOMIC GEOGRAPHY		

- Unit I. Meaning and scope of Economic Geography. Approach to the study of economic geography, recent trends, changing relationship between Economics and Economic Geography, Economic Development, Indicators of Socio-Economic Development, Rostow's Model of Stages of growth and development.
- Unit II. Economic Activities: Characteristics and Importance of Primary, Secondary and Tertiary economic activities. Classification of Agricultural system- Whittlesey's classification and Von-Thunen model of Agricultural Location.
- Unit III. Manufacturing Activities: Significance and types, Factors of Industrial Location, Iron and Steel Industry, Cotton Textile Industry. Theories of Industrial Location; Weber's and Smith models.
- Unit IV. Energy, Resources: Conventional Energy resources-Coal, Petroleum, Non-conventional energy resources-Solar Energy, World Energy Crises, International Trade: Problems and Prospects, World Trade Organization (WTO), Central Place Theories of Christaller and Losch.

Books Recommended:

1. Alexander, J.W., Economic Geography.
2. Boesch, H., A Geography of world Economy.
3. Brian, J. L., Berry et al., The Geography of Economic Systems.
4. Barlow, M. H. & R. G. Newton., Patterns and Processes in Man's Economic Environment.
5. Chisholm, M., Geography and Economics.
6. Jones, C. F., Economic Geography.
7. Grigg, D. B., Agricultural Systems of the World: An Evolutionary.
8. Lloyd, P. & P. Dickens., Location in Space; A Theoretical Approach to Eco. Geo.
9. Strahler, A. N. & A. Strahler., Geography and Man's Environment.
10. Thoman, R. S. & E. C. Conking., The Geography of Economic Activity.
11. Thoman, R., "Econ. Geog." in International Encyclopaedia of S. Science.
12. Miller, E. & E. Willard., A Geography of Manufacturing.
13. Mc. Carty, H. & J. B. Lindberg., A preface of Economic Geography.
14. Von Royan, W., Fundamentals of Economic Geography.
15. William Von Royen, et. al., Fundamentals of Economic Geography.
16. Zimmerman, E. W., World resources and Industries.
17. Hartshon, T. A., Economic Geography.
18. Majid Hussian, Economic Geography.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A110803T : Core	Year : First	Semester : Second
Course Title : ENVIRONMENTAL GEOGRAPHY		

- Unit I. Meaning and scope of Environmental Geography, Relations of environmental geography with other science, meaning, component and types of environment, approaches to the study of man-environment relationships.
- Unit II. Ecosystems, meaning, types and components of ecosystem, function of ecosystem, trophic levels, food chain and food webs. Ecological pyramid and flow of energy. Bio-Geo-Chemical Cycles-Nitrogen cycle, Carbon cycle and Hydrological cycle.
- Unit III. Environmental Degradation and Pollution: concept and types of Environmental Degradation, causes of Environmental Degradation, sources and types of pollution, Air Pollution, Adverse affect of air pollution on weather and climate, ozone depletion, green house effects, effects on human health, water pollution; surface and ground water, adverse effects on human health.
- Unit IV. Environmental Planning and Management: Environmental management-methods and approaches; Ecological basis of environmental management- Ecological principles; Survey, evaluation, preservation and conservation of resources. Environmental impact Assessment.

Books Recommended:

1. Chandna, R.C., 1998 Environmental Awareness, Kalyani Publishers, New Delhi.
2. Gaur, S., and Chandrashekhar, T., 2006, Global Environmental Crisis, Book Enclave, Jaipur.
3. Gupts, P.D., 2003, Environmental Issue for the 21st Century, Mittal Publication, New Delhi.
4. Morris, D., Freeland, J., Hinchliff, S., Smith, S. (ed.), 2003, Changing Environments, Pd. John Wiley and Sons Ltd., The Open University, U. K.
5. Park, C. C., 1980, Ecology and Environmental Management, Butterworths, London.
6. Md Noor., Persectives in Agricultural Geography, New Delhi.
7. Ali Mohammad. Food Production and Food Problem in India . N. Delhi.
8. Krishna, D., The New Agricultural Strategy, Delhi, 1971.
9. Bansil, B. C., Agricultural Problems in India, Delhi, 1971.
10. India 2004, Ministry of Information and Broad Casting, Govt. of India, New Delhi.
11. Survey of Agriculture and Survey of Industry, 2003, Hindu Publication.
12. C. B. Memoria, Economic and Commercial Geography of India.
13. Mahesh Chand and V.V. Puri, Regional Planning in India.
14. Paul Claval, An Introductions to Regional Geography.
15. Johnstone, R. J., Geography and Geographers Since 1945.
16. Sinha, B. N., Industrial geography of India.
17. Sant. M., Industrial Movement and Regional Development.
18. Bijli, S. M. Industrialization in the Third World.
19. India 2004, Government of India Publication.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A110804T : Third Elective	Year : First	Semester : Second
Course Title : GENERAL GEOGRAPHY		

- Unit I. **Basic Concepts:** Definition of Geography; General Geography, Regional Geography, Systematic Geography; Solar System; Motions of Earth-Rotation and Revolution; Concept of Latitude and Longitude; International Date Line; Calculation of Time.
- Unit II. **Components of Earth System:** Atmosphere, Lithosphere, Hydrosphere, Biosphere, Composition and Structure of Atmosphere; Interior of the Earth; Weather and Climate; Wind Circulation; Hydrological Cycle; Ecosystem, Food Chain and Food Web.
- Unit III. **Regional Geography:** Concept of Region; Components of Natural Regions; Natural Regions of the world; Man and Environment Relationship in Equatorial Region, Temperate Region and Polar Region.
- Unit IV. **Environment:** Concept of Environment- Physical and Cultural Environment; Hazards and Disasters, Social and Economic Disaster; Global Warming and Climate Change.

Books Recommended:

1. Hussain Majid, Fundamentals of Physical Geography, Rawat Pub, New Delhi.
2. Singh Savindra- Environmental Geography, Prayag Pustak Bhawan, Allahabad.
3. Blij H. E. Dc Geography, Regions and Concept, John Wiley and Sons.
4. Lal D. S. Climatology, Sharda Pustak Bhawan, Allahabad.
5. Gohchenglenong, Certificate Physical and Human Geography, latest addition.
6. Singh Savindra & Singh, J, Disaster Management- P. Pub., Allahabad.
7. Campbell J. B., Introduction to Remote Sensing, G., Ford press.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A110805T : Third Elective	Year : First	Semester : Second
Course Title : DISASTER MANAGEMENT		

- Unit I. Disaster-meaning and concept; hazards, risk and vulnerability. Disaster: Its management- plants, managing environment. Disaster its effect on different social groups; poverty and vulnerability. Disaster management: prevention, preparedness and mitigation.
- Unit II. Disaster- classification of disaster; Natural disaster - earthquake, floods, drought and global warming; causes, consequences and mitigation. Natural disaster - Examples from India.
- Unit III. Disaster- man made disaster, their types - technological and Industrial disasters. Social disasters: causes, consequences and mitigation. Man made disasters - Examples from India.
- Unit IV. Disaster management - relief and response; reconstructin and rehabilitation. Disaster - Strategies for survival, types of strategies. Importance of Information in disaster management, significance of remote sensing and GIS. Planning in the context of disaster management.

Reading List:

1. Government of India. (1997) Vulnerability Atlas of India. New Delhi. Building Materials & Promotion Council, Ministry of Urban Development, Government of India.
2. Kapur, A. (2010) Vulnerable India: A Geographical Study of Disaster, Sage Pub. New Delhi.
3. Modh, S. (2010) Managing Natural Disaster: Hydrological, Marine and Geological Disaster, Delhi.
4. Singh, R. B. (2005) Risk Assessment and Vulnerability Analysis, IGNOU, New Delhi.
5. Singh, R. B (ed), (2006) Natural Hazards and Disaster Management: Vulnerability and Mitigation, Rawat Publication, New Delhi.
6. Sinha, A. (2001). Disaster Management: Lessons Drawn And Strategies for Future, New United Press, New Delhi.
7. Stoltman, J. P. et al. (2004) International Perspectives on Natural Disasters, Kluwer Academic Publications.
8. Singh Jagbir (2007) "Disaster Management Future Challenges and Oppurtunities", 2007. Publisher- I. K. International Pvt. Ltd. S-25, Green Park Extension, Uphaar Cinema Market, New Delhi, India.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA
Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A110806P : Fourth Elective	Year : First	Semester : Second
Course Title : ADVANCE QUANTITATIVE TECHNIQUES		

Correlation analysis: Karl Pearson's Product moment, Spearman's Rank Correlation, Coefficient and their limits; test of significance on correlation co-efficient, scatter diagram.

Simple linear regression and multiple regression analysis: regression lines and residuals; Methods of constructing regression lines, properties of least square estimates, co-efficient of determination.

Test of significance: Chi-square test, student 't' test, variance estimate test.

Test for Distributions in Space; nearest neighbour analysis; spacing of settlement.

Books Recommended:

1. Hammond/Mc Cullah., Quantitative Techniques in Geog. Oxford, 1974.
2. Gregory, S., Statistical Method for Geography, Longman, 1975.
3. Berry, B.J.L., & Marble, D.F., Spatial Analysis: A Reader in Statistical Geography, New Jersey, 1968.
4. Cole, J.P., & King, C.A.M., Quantitative Methods in Geography, New York, 1968.
5. King, L.I., Statistical Analysis in Geography, New Jersey.
6. Johnson, R.J., Multivariate Statistical Analysis in Geography, 1978.
7. Elhance, D.N., Elementary statistics.
8. Pal, S.K., Statistical Methods in Geography.
9. Alvi, Zamiruddin., Statistical Geography.

DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

**Structure of Syllabus for the
Program: M.A. Subject: Geography**

Course Code : A110807P : Fourth Elective	Year : First	Semester : Second
Course Title : REMOTE SENSING		

- Stereoscopic Vision Test.
- Format and stereoscopic Orientation of Aerial Photographs.
- Determination of scale and Stereoscopic area.
- Determination of Principal Point and Conjugate Principal Points, Direction of Flight Line and Air Base.
- Calculation of Photographic coverage for a Planning Area.
- Mapping Land Use change Detection.
- Height Determination Methods
- Land use Measurement Methods
- Preparation of Landcover and Landuse Map
- Interpretation of Aerial Photographs.
- Population Census with Aerial Photographs.

Books Recommended:

1. American society of Photogrammetry: Manual of Photographic Interpretation, Banta Pub. Co., Wisconsin, 1960.
2. Avery, T.E., Interpretation of Aerial Photographs, Minneapolis, 1962.
3. Barrett, E.C., & Curtis, L.F., Introduction of Environ. Remote Sensing, 1976.
4. Dury, G.M., Map Interpretation, Isaac Pitman, London, 1952.
5. Cunan, R.J., Principles of remote sensing, London, 1985.
6. Hord, R.M., Remote sensing: Methods and Applications, N.Y., 1986.
7. Lender, D.R., Aerial Photographic, Mc Graw Hill, N.Y., 1960.
8. Lunder, D., Aerial Photography Interpretation: Principles and applications, McGraw Hill, N.Y., 1959.
9. Lilles & Kiefer, Remote sensing & Image Interpretation.
10. Reeves, R.G.(Ed.) Manual of Remote sensing (Vol.2) Virginia, 1975.
11. Sabins, F.F., Remote Sensing: Principles & Interpretation. 1982.
12. Smith, H.T.V., Aerial Photographs & their Application, N.Y., 1943.
13. Spurs, S.H., Photogrammetry & Photo Interpretation, N.D., 1960.
14. Stershew, A.I., Aerial Photography.
15. Thomas, E.A., Interpretation of Aerial Photographs, Minnesota.
16. Tomar, M.A., & Maslakar, A.R., Aerial Photographs in Land use & Forest Survey, Dehradun, 1974.
17. Usili, G.W. (Revised by Hearn, G.S.G.) Pract. Surveying, London, 1960.
18. White, L.P., Aerial Photography & Remote Sensing for soil survey.
19. James, B. Campbell, Introduction to Remote Sensing-2nd Ed. Taylor & Francis, London.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA
Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A110901T : Core	Year : Second	Semester : Third
Course Title : Advance Geomorphology		

- Unit I. Fundamental Concepts in Geomorphology:**
- Geological structures and landforms
 - Principles of uniformitarianism
 - Cycle of Erosion - concepts of Davis and Penck
- Unit II. Earth Movements:**
- Isostasy-Decline of Isostasy; Views of Airy and Pratt
 - Continental Drift Theory-concept of Wegener
 - Plate Tectonics-concept and related views
 - Mountain Building Theories-concepts of Kober, Daly and Holmes.
- Unit III. Exogenic Processes:**
- Weathering and soil formation
 - Dynamics of fluvial process and resulting landforms
 - Dynamics of glacial process and resulting landforms.
 - Dynamics of Aeolian process and resulting landforms.
- Unit IV. Applied Geomorphology:**
- Terrain classification and its application* Oil exploitation
 - Engineering projects
 - Drainage network analysis-Stream order, Sinosity Index and Drainage density

Book Recommended

1. Alam Clowes & Comfort, Processes and Landforms.
2. Blooms, A.L., Geomorphology-A Systematic Analysis of late Cenozoic landforms.
3. Cotton, Geomorphology.
4. Dowie, Isostasy.
5. Jolly., Surface History of the Earth.
6. Ollier, C.D., Weathering.
7. Sparks, B.W., Geomorphology.
8. Steers, J.A., Unstable Earth.
9. Strahler, A.H. & Strahler, A. H., Elements of Physical Geography.
10. Thornbury, W.D., Principles of Geomorphology.
11. Von Engeln., Geomorphology.
12. Wooldridge, S.W., & Morgan, R.S., An Outline of Geomorphology.

DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A110902T : Core	Year : Second	Semester : Third
Course Title : ADVANCE CLIMATOLOGY		

- Unit I. Nature and scope of climatology and its relationship with meteorology. The atmosphere: Structure and composition, insolation, heat-balance of the earth. Distribution of temperature: Temporal, vertical and horizontal, Green House effect.
- Unit II. Atmospheric Equilibrium; Stability and instability, potential temperature and evapo-transpiration. Distribution of atmospheric pressure and winds: Jet streams - their origin, types and distribution, monsoon winds.
- Unit III. Climatic Phenomena: Air masses and fronts, origin, growth, classification. Frontogenesis, types and weather associated with fronts. Cyclones, and anticyclones, Global warming.
- Unit IV. Climatic Classification: Koppen's Thornthwaites- A critical appraisal of each classification, Climates of the World: Tropical, Temperate, Desert, Interpretation and generation of climatic information, soils, agricultural activities.

Book Recommended

1. Barry & Perry., Synoptic Climatology.
2. Blair, T.A., Climatology-General and Regional.
3. Chorley, R.J. & Barry, R.G., Atmospheric Weather and climate.
4. Donn, W.L., Meteorology.
5. Jackson, I.J., Climate, Water and Agriculture in the Tropics, 1977.
6. Kendrew, W.G., Climates of the Continents.
7. Lal, D.S., Climatology.
8. Mather, J.R., Climatology: Fundamental and Application, 1974.
9. Patterson., Introduction to Meteorology.
10. Rama Sastery, A.A., Weather & Weather fore casting.
11. Rummey, G., Climatology and the world's climate.
12. Stringer., Foundation of Climatology.
13. Stringer., Techniques in Climatology.
14. Trewartha. G.T., An Introduction to Climate.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA
Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A110903T : Core	Year : Second	Semester : Third
Course Title : ADVANCE OCEANOGRAPHY		

- Unit I. Oceanography-nature, scope and development, distribution of land and water, Ocean bottom topography, bottom relief of Pacific, Atlantic and Indian Ocean.
- Unit II. Characteristics of Ocean water: temperature - distribution, salinity - composition, source and distribution, density of sea level.
- Unit III. Movement of ocean water: currents - causes and character, currents of Atlantic, Indian and Pacific Ocean, Waves, tides and theories of origin.
- Unit IV. Ocean deposits and coral reefs: sources, Types and distribution of ocean deposits, coral reefs-formation, condition of growth, type of theories of origin.

Book Recommended

1. Davis, R.J.A. 1986, Oceanography - An Introduction of the Marine Environment, Wln C. Brown, Iowa.
2. King, C.A., Oceanography for Geographers, Edward Arnold Pub.
3. Murray, S.J., 1913, Ocean, A General account of the Science of the sea, Thorton Butter Worth, London.
4. Siddartha, K. 1999, Oceanography, A Brief Intoduction, Kisalaya Pub, Pvt. Ltd., New Delhi.
5. Singh, S. 2002, Physical Geography, Prayag Pub, Allahabad.
6. Stahler, A. N. Stahler A. M., 1997, Geography and Man's Environment, John Wiley and Sons, New York.
7. Thurnman, H. V., 1978, Introduction to oceanography, Charles E. Merrill Pub Co., London.
8. Weyl, P. K. 1970, Oceanography an Introduction of the Marine Environment, John Wiley and Sons Ltd., London.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A110904T : Fifth Elective	Year : Second	Semester : Third
Course Title : RURAL GEOGRAPHY		

- Unit I. Concept and scope of rural geography; different approaches to study rural Geography, concept and significance of rural development: indicators of rural development.
- Unit II. Rural Settlement: Definition and characteristics; Types and patterns of rural settlements and their distribution with special reference to spacing, rural house type, based on building materials, size and shape.
- Unit III. Rural infrastructure facilities and amenities, New Agricultural technology; Rural transportation, rural education, rural Industries and rural marketing.
- Unit IV. Critical review of rural development strategies in India; Integrated Rural Development Programme (I.R.D.P.), Community Development Programmes, Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA), National Rural Health Mission (NRHM).

Books Recommended

1. Singh Kartar., Rural Development: Principal, Policies and Management.
2. Maheshwari, R.S., Rural Development in India.
3. Clout, S.D., Rural Geography.
4. Hussain, Majid., Agricultural Geography, New Delhi.
5. Bell, G.(Ed). Strategies for Human Settlements: Habitat and Environment.
6. Chisholm, M., Rural Settlement and Land Use.
7. Singh, R.L., et. al: Readings in Rural Settlement Geography.
8. Singh, K.N.(Ed.) Rural Development in India: Problems, Strategies and Approaches.
9. Wanmall, Sudhir., Service Centres in Rural India.
10. Mishra, H.N.(Ed.) Rural Geography.
11. Prasad, R. & Sarkar S., Rural India-Socio-Political development, Vol. I & II, Global Vision Pub. House, New Delhi.
12. Khullar D.R. India- A Comprehensive Geography, Kalyani Pub. New Delhi.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA
Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A110905T : Fifth Elective	Year : Second	Semester : Third
Course Title : URBAN GEOGRAPHY		

- Unit I. **Internal Structure of Cities:-** Meaning, scope and significance of Urban Geography; urban morphology and land use patterns, classical models of urban growth and evolution of functional zones - **Burgess's Concentric Zone Theory ; Hoyt's Sectoral Model; Harris and Ullman's multiple Nuclei Model** - formulation, salient features and critical evaluation of these models; **CBD** - meaning, internal structure, characteristic features and method of its delineation.
- Unit II. **Surrounding Relations:-** The urban economic base- terminology, concepts, geographic qualities of the basic, non - basic concepts; the city's spheres of influence (Umland)-methods of its determination; rural-urban fringe-conceptual explanation, internal structure, characteristic features.
- Unit III. **Settlement Theories and Concepts:-** The study of Walter Christaller's Central Place Theory and August's Losh settlement theory in the following heads-Initial formulation of the model and later developments; Salient features of the model and its applicability; **Losch's Theory of settlement-Rank-size Rule and Law of Primate City.**
- Unit IV. **Urbanization:-** Urbanization as a process of transformation-demographic process, economic process and socio-cultural process. Spatial pattern and trends of urbanization in India, patterns of urban growth in India-decadal, regional, different size classes of towns (I-VI).

BOOKS RECOMMENDED:

1. Alam, S.M., Hyderabad-secndarabad Twin Cities, Asia Publishing House, Bombay.
2. Barry, B.J.L. and Horton, F.F., Geographic perspectives on Urban Systems, Prentice Hall, Englewood Cliff, New Jersey, 1970.
3. Beaujeu Garnier, J., Chabot, G., Urban Geography, London, 1969.
4. Carter, Harold, The Study of Urban Geography, Edward Arnold Publishers, London.
5. Dickinson, R.E., 1964., City and Region, Routledge, London.
6. Gibbs, I.P., Urban Research Methods, New Jersey, 1961.
7. Hall, T., Urban Geography, London, 1988.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA
Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A110906P : Sixth Elective	Year : Second	Semester : Third
Course Title : CARTOGRAPHY		

- History, Development and Significance of Cartography.
- Representation of Relief and Climatic Data:
- Depiction of Relief: Drawing of Profiles-Serial, superimposed, composite and projected; Profiles and their usefulness in studying landforms.
- Gradient and Slope: Significance, calculation of gradient, scale of slopes
- Methods of slope analysis: Wentworth, Smith, Henry Ralsz and Robinson
- Hypsographic, Climographic and Altimetric Frequency curves
- Representation of Climatic Data: Climograph, Hythergraph and Rainfall Dispersion Diagram.
- Representation of Statistical Data:
Thematic Mapping- Choropleth and Isopleth; Lorenz Curve.

BOOKS RECOMMENDED

1. Campbell, J., Introductory Cartography, Prentice Hall, Inc., Englewood Cliff, New Jersey, 1984.
2. Cuff, D.J., & Mattson, M.T., Thematic Maps, their Design and Production, Methuen, New York., 1982.
3. Robinson, A.H., & others., Elements of Cartography, John Wiley and sons, New York (New edition).
4. Archer, J.E., & Dalton, T.H., Fieldwork in Geography, London.
5. National Atlas and Thematic Maps Organization (NATMO): National Atlas of India, Calcutta.
6. Monkhouse, F.J., Maps and Diagrams, Methuen & Co., London, 1967.

DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A110907P	Sixth Elective	Year : Second	Semester : Third
Course Title : FIELD STUDY REPORT			

Field study Report will be prepared by the students under guidance of the teachers. The teacher will guide proper procedure for the Field Study Report on the basis of the following points.

1. Selection of the problem.
2. Aims and objectives.
3. Hypotheses
4. Selection of the study area.
5. Methodology:
 1. Preparation of Questionnaire
 2. Personal interviews
 3. Preparation of survey chart
 4. Tabulation and calculation.
6. Data interpretation and preparation of Field Study Report.

The students will select any village or a sector of urban centres such as slum, popular settlements etc. for Field Study Report. The Report should be prepared in about 50 pages.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A111001T : Core	Year : Second	Semester : Fourth
Course Title : AGRICULTURE GEOGRAPHY		

- Unit I. Aims, objectives and scope of Agricultural Geography, Basic concepts, Historical Perspective and recent trends. Approaches to the study of agricultural geography-regional and systematic approach, Ecological and Commodity approach. Spread of agriculture in the world. Various agricultural techniques-crop combination, crop diversification, agricultural efficiency etc.
- Unit II. Influence of major factors on the performance of agriculture. Whittlessey's classification of agricultural systems of the world-problems and prospects of agriculture and its economic impact on regions of the world.
- Unit III. Concepts of Land use, Agricultural land use-land capability classification and land use planning for agricultural development. Agricultural Regionalization. Land Use Location Theory-Von Thunen and its applicability; Modern Theories of Agricultural Location: Optimum Physical and Economic Conditions and Limits.
- Unit IV. Green Revolution in India, Impact of green revolution in India, Green Revolution and regional imbalances. Problems of India Agriculture, Measures for Agricultural Development. Concept of second green revolution in India.

Books Recommended:

1. Duckhan, A.N. and Masfield, G.B., *Farming Systems of the world*, London, 1970.
2. Griggs, D.G., *An Introduction to Agricultural Geography*, 1964.
3. Husain, Majid., *Agricultural Geography*, New Delhi.
4. John, R, Tarrant, *Agricultural Geography*.
5. Mohammad, A., *Food Production and Food Problem in India*, New Delhi.
6. Mohammad, N., *Perspectives in Agricultural Geography*, New Delhi.
7. Morgan, W.B. and Munton, P.J.C. *Agricultural Geography*. London, 1971.
8. Shafi, M., *Agricultural Geography of South Asia*, Macmillan, New Delhi 2000
9. Shafi, M., *Agricultural Geography*, Darling Kindersley, New Delhi, 2006
10. Singh, J. and Dhillon, S.S., *Agricultural Geography*, 1970
11. Symons, L., *Agricultural Geography*, London, 1967
12. Wrigley, G., *Tropical Agriculture*, 1979.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA
Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A111002T : Core	Year : Second	Semester : Fourth
Course Title : POLITICAL GEOGRAPHY		

- Unit I. Introduction to Political Geography:** Definition and Historical Development of Political Geography. Recent Development in Political Geography. Distinction between Geo-Politics and Political Geography. Approaches to the Study of Political Geography; Hertzorn's Functional, Whittesey's Landscape and Joni's Unified Field theory.
- Unit II. Concept and State, Nation and Boundary:** Definition and Components of State. Definition of Nation and Nation State. Nationalism/Nation Building. Geographical factors of state: Physical, spatial and human & Economic. Definition of Boundary and Frontier and their Classification.
- Unit III. Global Strategies Models and Colonization:** Meckinder's Geographical Pivot and Heartland Model, Spykman's Rim Land Model. Critical Assessment of Heartland and Rim Land Model and their Relevance to World" Geo politics. Concept of Colonization, Factors and Styles of Colonization. Neo Imperialism: Political, Economic and Cultural Mechanism.
- Unit IV. Political Geography of India and Geography of Election:** India Under Colonial Rules. India as a Federal country. India as a Unitary or Union of States. India's Relation with China and Pakistan. Concept and Definition of geography of Election or Electoral Geography. Approaches to Study of Election/ Electoral Geography.

Books Recommended:

1. Alexander, L.M. World Political Pattern, London, 1964.
2. De Blij, H.J. Systematic Political Geography, New York, 1967.
3. Dikshit, R.D., Political Geography, New Delhi, 2004.
4. Dikshit, R.D. Political Geography, A Century of Progress, New Delhi, 1999.
5. Dikshit, S.K. Electoral Geography of India, Varanasi, 1993.
6. Dwivedi, R.L. Fundamentals of Political Geography, Allahabad, 2010.
7. Jackson, W.A.D. Politics & Geographic Relationship, Printice Hall '71
8. Kasperson/Minghi. Structure of Political Geography, London '70
9. Pounds, N. Political Geography, London 1963.
10. Taylor, P. Political Geography, London, 1985.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA
Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A111003P : Savanth Elective	Year : Second	Semester : Fourth
Course Title : FIELD STUDY (SOCIO-ECONOMIC SURVEY)		

A. Field Training Study Methods

- Objectives and scope of the field enquiry.
- Methods of field work in different areas.
- Scale-macro, meso and micro.
- Preparation of questionnaire.
- Sampling techniques for the collection of data.
- Collection, processing and presentation of data.

Fieldwork will be carried out on the basis of a interview schedule/questionnaire prepared.

The data so collected will be analyzed by the candidate by preparing suitable tables, maps and diagrams. A report on the basis of survey conducted by the candidate shall be prepared.

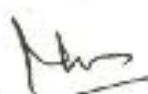
The report duly certified by the teacher-in-charge shall be submitted.

Students are required to undertake a field study of a distant area or region to study certain aspects of social, cultural landscape and on-spot observations under the supervision of teacher who will accompany the students.

A comprehensive report on the area/region shall be submitted by the students within two weeks on their return from the visited place.

Books Recommended:

1. Archer, J.E., & Dalton, T.H., *Fieldwork in Geogaphy*, London, 1968.
2. Elhance, D.N., *Fundamental of Statistics*, Allahabad, 1972.
3. Jones, P.A., *Fieldwork In Geography*, London, 1968.
4. Glodard, R.H., *Field Techniques and Research Methods in Geography*, Dubuque 1982.
5. Wheelso, K.S., & Harding, M., *Geographical Fieldwork*, London, 1965.
6. Mahmood, A., *Statistical Methods in Geographical Studied*, Rejesh Publication, Delhi, 1977.
7. Geography, S., *Statistical Methods and the Geographers*, Longmans, London.
8. Monkhouse, F.J., *Maps and Diagrams*, Methuen & Co., 1952.
9. Berry, B.J.L., & Marble, F., *Spatial Analysis: A Reader in Statistical Geography*, New Jersey, 1968.

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

**Structure of Syllabus for the
Program: M.A. Subject: Geography**

Course Code : A111004P : Seventh Elective	Year : Second	Semester : Fourth
Course Title : ADVANCE SURVEYING		

- Plane Table Survey
 - Radiation Method with Telescopic Alidade
- Prismatic Compass Survey
 - Correction of bearing and plotting
 - Calculation of included angles and plotting
 - Elimination of Error-Bowditch Method
- Dumpy Level Survey
 - Rise and Fall System
 - Plotting of Longitudinal Sections.
- Theodolite
 - Measurement of horizontal angles

Books Recommended:

1. Punmia, B.C., Surveying and Leveling, Vol I.
2. Alvi, Zamiruddin, A Text Book of Surveying

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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA
Structure of Syllabus for the
Program: M.A. Subject: Geography

Course Code : A111004P : Research Project/ Dissertation	Year : Second	Semester : Fourth
Course Title : Major Research Project / Dissertation		

Major Research Project/ Dissertation is a compulsory Part of practical in M.A. IV semester syllabus. The students will prepare a dissertation on a specific topic suggested by the allotted teacher for guidance. The Dissertation should not be less than hundred pages. The topic can be selected from various branches of geography such as Geomorphology, Climatology, Oceanography, Rural Geography, Urban Geography, Agricultural Geography, Political Geography, Electoral Geography, Regional Development & Planning, Geography of Tourism, Transport Geography, Remote Sensing and GIS, Industrial Geography, Geography of Health, Marketing and Commercial Geography and any other topic related to Geography. The dissertation should be if possible, on spatio-temporal basis. The Study should be based on inductive or deductive approach. The dissertation will include the problem, aim and objectives, hypothesis research methodology and approaches and also the outcome of the Report or dissertation which will be valuable in Geographical Research in future.

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**DR. RAMMANOHAR LOHIA AVADH UNIVERSITY,
AYODHYA.**

Proposed (Revised) Syllabus for the

PROGRAM – M.A. Ist & IInd SEMESTER

SUBJECT – SOCIOLOGY
(College)

2023 – 2024



DR. RAMMANOHAR LOHIA AVADH UNIVERSITY, AYODHYA.

PROGRAM – M.A.

Semester – Ist & IInd

SUBJECT – SOCIOLOGY

Revised Syllabus (College) 2023

Structure of Syllabus Developed by				
SN	Name of BoS Convenor / BOS Member	Designation	Department	College/University
1.	Prof. Ashutosh Sinha	Dean & Professor	Faculty of Arts	Dr.RML Avadh University, Ayodhya
2.	Dr. Anil Kumar Srivastava	Convenor & Professor	Sociology	J.N.M.P.G.College, Barabanki.
3.	Dr. Mithilesh Choubey	Associate Professor	Sociology	Gayatri Vidyapeeth P.G. College, Risiya, Bahraich.
4.	Dr. Madan Mohan Singh	Associate Professor	Sociology	S.T.P.G. College, Kadipur, Sultanpur.
5.	Prof. Sitaram Singh	Principal & Professor	Sociology	J.N.M.P.G.College, Barabanki.
6.	Prof. Anoop Singh	Principal & Professor	Sociology	PPN College, Kanpur.
7.	Prof. Brajesh Kumar Singh	Professor	Sociology	MGKV, Varanasi
8.	Prof. A.K.Pandey	Professor	Sociology	BIU, Varanasi
9.	Prof. Amila Singh	Professor	Sociology	MGKV, Varanasi
10.	Dr. Dhruv Bhushan Singh	Associate Professor	Sociology	Govt. P.G. College, Dhanapur, Chandauli

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Program : M.A. Subject : SOCIOLOGY

Course Code		Course Title	Credits	T/P	- Evaluation	
A	B				CIR	ETE
A	B	C	D	E	F	G
SEMESTER I (YEAR I)						
A070-01T	CORE	Indian Knowledge System, Society and Culture	5	T	25	75
A070-02T	CORE	Western Social Thinkers	5	T	25	75
A070-03T	CORE	Sociology of Development and Planning	5	T	25	75
A070-04T	FIRST ELECTIVE (Select any one)	Sociology of Culture	5	T	25	75
A070-05T		Indian Social Thinkers	5	T	25	75
A070-06T		Sociology of Social Movements	5	T	25	75
A070-07T		Sociology of Information Society	5	T	25	75
A070-08P	SECOND ELECTIVE (Select any one)	Project Presentation on Urban Sociology	5	P	50	50
A070-09P		Project Presentation on Tribal Studies	5	P	50	50

SEMESTER II (YEAR I)

A070-01T	CORE	Advanced Sociological Theories	5	T	25	75
A070-02T	CORE	Methods and Techniques in Social Research	5	T	25	75
A070-03T	CORE	Rural Sociology	5	T	25	75
A070-04T	Generic THIRD ELECTIVE (Select any one)	Computer Application in Social Research	5	T	25	75
A070-05T		Social Work	5	T	25	75
A070-06T		Industrial Psychology	5	T	25	75
A070-07T		Human Resource Management	5	T	25	75
A070-08P	FOURTH ELECTIVE (Select any one)	Project Presentation on Contemporary Indian Society and Culture	5	P	50	50
A070-09P		Project Presentation on Issues and Problems of Indian Society	5	P	50	50

SEMESTER I YEAR I

Program/Class: M.A.	Year: I	Semester: I
Subject : Sociology		
Course Code : A070-01T	Course Title : Indian Knowledge System, Society and Culture	
Course Outcomes : The course is aimed at presenting a comprehensive, integrated and empirically-based profile of Indian society. The focus is on the contemporary Indian society. It is presumed that student will become familiar with intricacies of contemporary Indian Society.		
Credits : 5	Project Presentation : Core Compulsory	
Maximum Marks: 25 + 75	Min. Passing Marks : 33	
Total No. of Lectures- Tutorials-Practicals(in hours per week) : L-T-P : 5 - 0 - 0		

Unit	Topics	No. of Lectures
I.	Indian Knowledge System: Meaning and Importance. Brief Introduction to Veda, Purana, Ramayana and Mahabharata. Philosophical Foundations of IKS: Introduction to Samkhya, Visheshika and Nyaya. Buddhism and Jainism. Contribution of Yajnavalkya, Panini, Sushruta, Aryabhata, Bhaskaracharya and Patanjali. Ancient Knowledge Centres of Taksila, Nalanda and Vikramsila.	15
II	The Traditional bases of Indian Society, Dharma, The Doctrine of Karma, Myths and Symbols, the concept of man, Purusarthas, the scheme of Ashramas.	15
III.	Varna and Castes, Theories of Caste, The sacramental marriage and Joint Family, Recent Changes and Trends of Caste, Family and Marriage	15
IV	Composite nature of Indian Society and Culture, Cultural Synthesis. Social influence of Islam and Christianity.	15
V	Contemporary Social Stratification, New Indian Elite, Social Movements and Social Integration.	15

Suggested Readings:

- Abhang Pranay , Moghe Pramod , Holay Prashant , Kulkarni Satish : Rediscovering Indian Knowledge System
 Avadhesh K., Kapoor Kapil : Indian Knowledge Systems – Vol. 1 & 2
 Jha, Amit : Traditional Knowledge System in India
 Dwivedi Prof. Meera . भारतीय ज्ञान-परंपरा परिस्थितिकी पर्यावरणन एवं में , Vidyanidhi Prakashan, New Delhi 2021
 Singh Bal Ram : Exploring Science in Ancient Indian Texts
 Atal, Yogesh (2014) *Studying the Social Sphere: Introduction to Sociology* Pearson
 Bottomore, T.H. 1972. *Sociology: A guide to problems and literature*. Bombay: George Allen and Unwin (India).
 Giddens, Anthony Mitchell Duncier, Richard P. Appelbaum. 2007. *Introduction to Sociology*, Sixth Edition, New York: W.W Norton
 Kame, P.V.: History of Dharmashastra, Bhandarkar Oriental Research Institute. 1962
 Prabhu, P.H.. Hindu Social Organization, Popular Prakashan, 1963.

Kapadia, K.M.: Marriage and Family in India. OUP, 1966.

Manu : *Manusmriti*

Kautilya. : *Arthashastra*

Jayaram, N. 1988. *Introductory Sociology*. Madras: Macmillan India

Merton, R.K. 1957. *Social Theory and Social Structure*. London: Free Press

Schaefer, Richard T. and Robert P.Lamm. 1999. *Sociology*. New Delhi: Tata-McGraw-Hill.

Johnson, Harry M. 1995. *Sociology: A systematic introduction*. New Delhi: Allied Publishers.

Davis, Kingsley. 1949. *Human Society* New York: Macmillan Co.

Rosenberg Michael. 1983. *An Introduction to Sociology* Methuen Publications

Haralambos, M. 1998. *Sociology: Themes and Perspectives*. New Delhi: Oxford University Press

Mac Iver R.M and Charles H Page. 1981. *Society: An Introductory Analysis* New York: Macmillan

Wallerstein, Immanuel 2009. *Open the Social Sciences* New Delhi: Sage/Vistara

Worsley, Peter. 1970. *Introducing Sociology* Harmondsworth: Penguin Books

Inkeles, Alex 1964. *What is Sociology? An Introduction to the Discipline and Profession* New Delhi: Prentice Hall

Brown Ken 2005. *An Introduction to Sociology* London: Polity

Moor, Wilbert and Robert Cook. 1967. *Social Change*. New Delhi: Prentice-Hall

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:

Suggested Continuous Internal Evaluation Methods (25 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz

Course prerequisites: To study this course, a student must have had the certificate/diploma/Bachelor.

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad

Further Suggestions:

Program/Class:	M.A.	Year: I	Semester: I
Subject: Sociology			
Course Code: A070-02T		Course Title: Western Social Thinkers	
Course outcomes: This course is offered to provide the students with the necessary foundations in the major thinkers and pioneers of sociological thinking such as Marx, Weber, Durkheim and Pareto. A sound understanding of these thinkers would help student to understand the contemporary and "current social issues and problems. The students will be able to engage with conceptual frameworks in sociology with ease and apply them to their understanding of social issues.			
Credits: 5		Core Compulsory	
Max. Marks: 25+75		Min. Passing Marks: 33	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 5-0-0			



Unit	Topics	No. of Lectures
I.	Historical Socio-Economic Background of the Emergence of Sociology. Auguste Comte : The Law of Human Progress- Hierarchy of Sciences-Social Statics and Dynamics Herbert Spencer : Evolutionary Theory and Organic Analogy.	15
II.	Vilfredo Pareto : Contribution to the Methodology – Logico-experimental Method. Logical and Non-logical Actions, Residues and Derivations and their Classifications; Theory of Social Change: Elites and Masses; Types of Elites; the Circulation of Elites.	15
III.	Emile Durkheim ; Contribution to the Methodology of Sociology – Concept of Social Facts, Rules of Sociological Method, Division of Labour; Mechanical and Organic Solidarities; Anomie. Theory of Suicide: Types of Suicide; the Causes of Different Types of Suicide; Durkheim's Concept of Religion; Religious Rituals and their Types	15
IV.	Karl Marx : Materialistic Interpretation of History; Dialectical Historical Materialism as a Perspective of Social Change; Mode of Production and Social Structure; Concepts of Surplus Value and Exploitation. Classes and Class Conflict; Alienation in the Capitalist Society; the Proletariat Revolution; Classless Society; Ideology as a Part of Super Structure; The Theory of Religion.	15
V.	Max Weber : Intellectual Background; Concept of Sociology; Concept of Social Action; Types of Social Action; Verstehen; Ideal Type; Theory of Stratification: Class, Status and Party. Analysis of Capitalism; the Protestant Ethic and the Spirit of Capitalism; Power and Authority, Types of Authority: Traditional, Charismatic, and Rational Legal; the Ideal Type of Bureaucracy.	15

Suggested Readings:

- Alexander, J. (Ed.) 1988. Durkheimian Sociology: Cultural Studies, Cambridge: Cambridge University Press.
- Aron, R. 1970. Main Currents in Sociological Thought, Vol. II, Harmondsworth: Penguin.
- Beaud, Michel. 1970. A History of Capitalism, 1500-1980, New York: Monthly Review Press.
- Benton, T. 1977. Philosophical Foundation of the Three Sociologies, London: Routledge and Kegan Paul. Coser, L. A. 1977. Masters of Sociological Thought, New York: Harcourt Brace.
- Durkheim, E. 1938. The Rules of Sociological Method, New York: The Free Press.
- 1947. The Division of Labour in Society, New York: The Free Press.
- 1952. Suicide – A Study in Sociology, London: Routledge & Kegan Paul.
- 1961. The Elementary Forms of the Religious Life, New York. Collier Books.
- Fletcher, Ronald. 1971. The Making of Sociology: Developments, Vol. II, London: Nelson.
- Giddens, A. 1973. Capitalism and Modern Social Theory: An analysis of Writings of Marx, Durkheim and Weber, London: Cambridge University Press.
- Godlove, T. F. 2005. Teaching Durkheim, Oxford: Oxford University Press.
- 1978. Durkheim, London: Fontana.
- Hughes, J. A., Martin, P. J. and Sharrock, W. W. 1995. Understanding Classical Sociology – Marx, Weber and Durkheim, London : Sage Publications.
- Lukes, S. 1972. Emile Durkheim: His Life and Work, New York: Harper & Row.
- Marx, Karl. 1964. Selected Writings in Sociology and Social Philosophy, (T. Bottomore and M. Rubel, Eds.), London: McGraw Hill.

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Marx, Karl. 1970. *Contribution to the Critique of Political Economy*, Moscow: Foreign Publishing House. -----
 1970. *Capital*, Vol. I, II & III, Moscow: Progress Publication.

Marx, Karl. & Engels, F. 1950. *Manifesto of the Communist Party*, Moscow: Foreign Publishing House.

Marx, Karl. & Engels, F. 1952. *The German Ideology*, (1st & the last chapter) Moscow: Foreign Publishing House.

McIntosh, I. 1997. *Classical Sociological Theory: A Reader*, Edinburgh: Edinburgh University Press.

McLellan, David. 1977. *Karl Marx: Selected Writings*, Oxford: Oxford University Press.

Nisbet, Robert A. 1966. *The Sociological Tradition*, New York: Basic Books.

Parsons, Talcott. 1937. *The Structure of Social Action*, New York: McGraw-Hill.

Ritzer, George. 1996. *Classical Sociological Theory*. New York: McGraw-Hill.

Stedman Jones, S. 2001. *Durkheim Reconsidered*, Cambridge: Polity Press.

Weber, Max. 1946. *From Max Weber: Essays in Sociology*, New York: Oxford University Press.

-----, 1947. *The Theory of Social and Economic Organization*, New York: The Free Press.

-----, 1949. *The Methodology of Social Sciences*, Toronto: Collier-Macmillan.

-----, 1958. *The Protestant Ethics and the Sprit of Capitalism*, New York: Charles Scribner's sons.

-----, 1978. *Economy and Society*, Vol. I & II, Berkeley: University of California Press.

Zeitlin, Irvia. 1981. *Ideology and the Development Sociological Theory*. New York: Prentice Hall.

This course can be opted as an elective by the students of following subjects:
 This is elective course open for all.

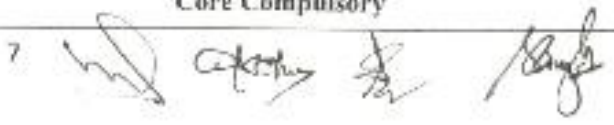
- Suggested Continuous Evaluation Methods:**
 Suggested Continuous Internal Evaluation Methods (25 Marks):
- Seminar/Assignment on any topic of the above syllabus.
 - Test with multiple choice questions / short and long answer questions.
 - Research: Orientation of the student.
 - Quiz

Course prerequisites: To study this course, a student must have had the subject **Sociology in the class Bachelor.**

Suggested equivalent online courses: IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

Further Suggestions:

Program/Class: M.A.	Year: I	Semester: I
Subject : Sociology		
Course Code : A070-03T	Course Title : Sociology of Development and Planning	
<p>Course Outcomes : The main thrust of the course is to familiarize students with the dynamics of development in terms of how it has been conceptualized by various development thinkers, how various Perspectives on development have given rise to newer ways of looking at the phenomenon as well as the processes of development. Finally, we examine the case of the Indian economy and its development, planning, growth, and poverty and analyze them in terms of different phases. Students would not only be able to understand various complex and contentious issues of development and underdevelopment but will also be able to pursue professional careers as development academics, planners, managers, policymakers etc.</p>		
Credits : 5	Core Compulsory	



Maximum Marks: 25+75	Min. Passing Marks: 33
Total No. of Lectures- Tutorials-Practicals(in hours per week) ; L : T : P : 5-0-0	

Unit	Topics	No. of Lectures
I.	Changing Conceptions of Development: Economic Growth, Social Development, Problems of Developing Societies.	10
II.	Features of Capitalism, Imperialism Socialism and Mixed Economy; Theories of Imperialism: Lenin and Schumpeter;	10
III.	Theories of Underdevelopment: Paul Baran and A. G. Frank, I. Wallerstein and Samir Amin. E.F.Schumacher.	15
IV.	Current Approaches to Development: Capability Approach (Amartya Sen and others) and Social Capital Approach (Bourdieu and Others)	10
V.	Critical Perspectives on Development: Neo-Marxian, Liberal, and Ecological;	10
VI.	Culture and Development. Human Development, Sustainable Development, Socio-cultural Sustainability, Millennium Sustainable Goals & Sustainable Development Goals and Multiple Sustainability.	10
VII.	Concept and Types of Planning, Planning in India- India through Five Year Plans, Role of NITI AYOJ; Concept of Welfare State; India as a Welfare State; the Role of Civil Society and NGO in Development. Current Development Programmes run by Government. e.g. MNREGA, PM AASHA, Ayushman Bharat, PM Mudra Yojana, PM Ujjwala Yojana, PM Awas Yojana, PM Kaushal Vikas Yojana, Digital India, PM Jan Dhan Yojana, Swachh Bharat Abhiyan. etc..	10

Suggested Readings:

- Amun, Samir. 1974. Accumulation on a World Scale: A Critique of the Theory of Development, New York: Monthly Review Press.
- Amun, Samir. 1976. Unequal development: An Essay on the Social Formations of Peripheral Capitalism, Hassocks: Harvester Press.
- Baran, Paul. 1957. The Political Economy of Growth, New York: Monthly Review Press.
- Dreze, Jean & Sen, Amartya, 1999. "India: Economic Development and Social Opportunity," OUP Catalogue, Oxford University Press.
- Frank, A.G. 1969. Capitalism and Underdevelopment in Latin America, New York: Monthly Review Press.
- Frank, A.G. 1966. "The Development of Underdevelopment", Monthly Review, September XVIII.
- Frank, A.G. 1979. Development Accumulation and Underdevelopment, London: Macmillan.
- Lenin, V.I. 1915. Imperialism, as the Highest Stage of Capitalism, Moscow: Progress Publishers.
- Hoselitz. Social Aspects of Economic Development
- Krishna. Anirudh, 2002. Social Capital: Tracing the Roots of Development and Democracy, Columbia University Press.
- Lerner, D. 1958. The Passing of Traditional Society, New York: Free Press.
- McClelland, D.C. 1961. The Achieving Society, Princeton: Princeton University Press.
- McClelland, D.C. Achievement Motive,

Myrdal, Gunnar. 1968. The Asian Drama, New York: Pantheon Books.
 Schumpeter, J.A. 1950. The Capitalism, Socialism and Democracy, London:
 Allen and unwin. Schumpeter, J.A. 1951. Imperialism and Social Classes, New York: Kelley
 Wallerstein, E. 1974. The Modern World System, New York: Academic Press.

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:

Suggested Continuous Internal Evaluation Methods (25 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz.

Course prerequisites: To study this course, a student must have had the subject Sociology in the class Bachelor

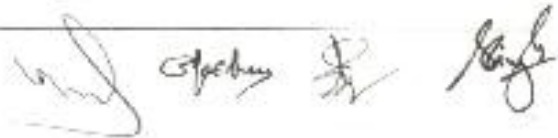
Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

Further Suggestions:

Program/Class:	M.A.	Year: I	Semester: I
Subject: Sociology			
Course Code: A070-04T		Course Title: Sociology of Culture	
Course outcomes: The course will enable the students to understand about cultural aspect of society. folk culture of Indian society and it will enhance knowledge of cultural dynamics and commodification of culture.			
Credits: 5		Elective	
Max. Marks: 25+75		Min. Passing Marks: 33	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 5-0-0			
Unit	Topics		No. of Lectures
I.	The concept of Culture, Characteristics of Culture. Typology of Culture, Basic elements of Culture, Material Culture and Non Material Culture, Cultural Lag.		15
II.	Theories of Culture: Kroeber's theory of Culture, Functional Theory- Malinowski, Redcliffe Brown and Spencer. Cultural Change. Major Theories of Cultural Change: Cyclical, Linear. Theory of Immanent Change, Formation of major Cultural System, the Organic Approach.		20
III.	Concept of Cultural Dynamics- Spangler, Toynbee and Sorokin. Culture and Civilization, the concept of Density, Birth and Growth of Civilization, Decay and Disintegration of Civilization.		20
IV.	The Private and Public realism, Emergence of Mass Culture. Culture as structure, Cultural Relativism, Ethnocentrism, Cultural Ecology, Cultural Pluralism, Multi Culturalism. Commodification of Culture, Acculturation, Culture and Mass Media.		20

Suggested Readings:

9 

सामाजिक विचार-विचार व संस्कृति के बारे में अध्ययन

Upadhyay, V.S. : History of Anthropological Thought, Concept publishing

Milton Singer : Religion and Struggle for Power.

Malinowski, B. : Magic, Science and Religion

Tripathi, B.D. : Sadhus of India

R. Benedict Patterns of Culture

A. Toynbee : A Study of History Parakey Gaya Company, New Delhi

P. Sorokin : Fundamentals of Cultural Sociology

----- Social and Cultural Dynamics

Robert Redfield : The Little Community

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:

Suggested Continuous Internal Evaluation Methods (25 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz

Course prerequisites: To study this course, a student must have had the subject Sociology in the class Bachelor

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

Program/Class: M.A.		Year: I	Semester: I
Subject: Sociology			
Course Code:	A070-05T	Course Title: Indian Social Thinkers	
Course outcomes: This course will introduce students to Indian social thinkers who contributed immensely to understand the Indian society through the ages. It will help them to understand Indian society, their perception and ideas from different perspective			
Credits: 5		Elective	
Max. Marks: 25+75		Min. Passing Marks: 33	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 5-0-0			
Unit	Topics	No. of Lectures	
I.	Social Thought of Manu and Kautilya	15	
II.	Louis Dumont - Social Hierarchy, Radhakamal Mukherjee -Social Structure of Values	15	
III.	A.K.Saran -Traditional thought, Secularism and Modernization. Yogendra Singh - Modernization of Indian Tradition	15	
IV.	Indian Renaissance, Swami Dayanand Saraswati - Social Thought, Arya Samaj Raja Ram Mohan Roy - Social Thought, Brahm Samaj , Swami	15	

	Vivekanand-Philosophy, Role of Youth in Nation building.	
V.	Nanaji Deshmukh - Rural Reconstruction, Acharya Narendra Dev- Political and Social Ideas Dr.Rammanohar Lohia-Socialism. Jai Prakash Narain-Socialistic Thought, 'Total Revolution', Aurobindo – Nationalism	15

Suggested Readings:

1. Manu : Manusmriti
2. Kautilya : Arthashastra
3. Lohia, Rammanohar : Marx, Gandhi and Socialism, Navahind,Hyderahad.1963
4. Saran, A.K. : On the theories of Secularism and Modernization, Aditya Prakashan.2007
5. Saran, A.K.: Sociology of Knowledge and Traditional Thought, Aditya Prakashan.1998
6. Singh, Yogendra: Modernization of Indian Tradition, Rawat Publication,
7. Saraswati,Dayanand - Satyarth Prakash.
8. Sri. Aurobindo : The Life Divine
9. Mukherjee, Radha Kamal: The Social Structure of Values, MacMillan & Co.,London.1949
10. Narain, Jai Prakash : Why Socialism ?, 1936
11. Narain, Jai Prakash : "A Plea for Reconstruction of Indian Polity", Akhil Bharat Sarva Seva Sangh Prakashan,Varanasi. 1959
12. Nartin, Jai Prakash : Cultural Variation, Diss, The Ohio State University,1929.
13. Bimal Prasad : Concept of Total Revolution: An Introductory Essay(JP and Social Change).

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:

Suggested Continuous Internal Evaluation Methods (25 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz

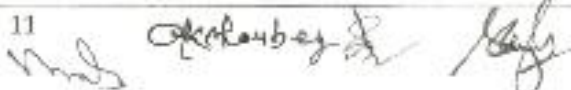
Course prerequisites: To study this course, a student must have had the subject Sociology in the class Bachelor.

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

Further Suggestions:

Program/Class.	M.A.	Year : I	Semester: I
Subject : Sociology			
Course Code : A070-06T		Course Title : Sociology of Social Movements	
Course Outcomes : The objective of this course is to sensitize students to the variety and dynamics of social movements and their role in social transformation to help them understand the various approaches to the study of social movements. The course will hopefully enable the students to look at social movements in a sociological and comparative perspective..			
Credits : 5		Elective	
Maximum Marks. 25 + 75		Min. Passing Marks : 33	
Total No. of Lectures- Tutorials- Practicals(in hours per week) : L-T-P : 5-0-0			
Unit	Topics		No. of Lectures

11


I.	Concept and Types of Social Movements; Methods and Techniques in Movement Studies.	15
II.	Theoretical Approaches: Marxian, Relative Deprivation, Collective Behaviour, and Resource Mobilization.	15
III.	Traditional Social Movements in India: Peasant Movement; Labour and Trade Union Movement;	15
IV.	Tribal Movement; Nationalist Movement.	15
V.	New Social Movements in India: Dalit Movement, Women's Movement, Ecological & Environmental Movement, Ethnic Movements	15

Suggested Readings :

- Banks, J.A. 1972 : The Sociology of Social Movements (London : Macmillan)
 Desai, A.R. Ed. 1979 : Peasant Struggles in India (Bombay : Oxford University Press)
 Dhanagare, D.N., 1983 : Peasant Movements in Indian 1920-1950 (Delhi : Oxford University Press)
 Gore, M.S., 1993 : The Social Context of an Ideology : Ambedkar's Political and Social Thoughts (New Delhi : Sage)
 Gommen, T.K., 1990 : Protest and Change : Studies in Social Movements (Delhi : Sage) Sociology
 Rao, M.S.A., 1979 , Social Movements in India (New Delhi : Manohar)
 Rao, M.S.A. , 1979 : Social Movements and Social Transformation (Delhi : Macmillan)
 Singh, K.S., 1982 : Tribal Movements in India (New Delhi : Manohar)
 Sellot, Eleanor, 1995 : From Untouchable to dalit : Essays on the Ambedkar Movement (New Delhi : Manohar)
 References

- Gouldner, A.W., 1950 ed. : Studies in Leadership (New York : Harper and Brothers)
 Gommen, T.K., 1972 : (Charisma, Stability and Change : An Analysis of Bhoodan Grandan Movement. (New Delhi : Thomas Press)
 Shah, Ghanshyam, 1977 : Protest Movements in two Indian States. New Delhi : Ajanta..
 Shah, Ghanshyam, 1990 : Social Movements in India; a review of the literature (Delhi: Sage)
 Shah, Namita, 1992 : The Issues at Stake : Theory and Practice in the Contemporary women's movements in India (New Delhi : Kal: for Women)
 Shiva, Vandana, 1991 : Ecology and the Politics of Survival (New Delhi : Sage)

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:

Suggested Continuous Internal Evaluation Methods (25 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz.

Course prerequisites: To study this course, a student must have had the subject Sociology in the class Bachelor.

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

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Further Suggestions:

Program/Class: M.A.	Year : I	Semester: I
Subject : Sociology		
Course Code : A070-07T	Course Title : Sociology of Information Society	
Course Outcomes : This course will enable student to understand and explore the rapid and profound social, economic cultural and political changes over the past decades due to the advent of information technology revolution. The primary focus being drawn to the internet and related computer technology, the course will be addressing the role of technology in shaping social structures and institutions, social life and relationships and understanding of self and others.		
Credits : 5	Elective	
Maximum Marks: 25+75	Min. Passing Marks : 33	
Total No. of Lectures- Tutorials-Practicals(in hours per week) : L-T-P : 5-0-0		

Unit	Topics	No. of Lectures
I.	Technology society and historical change. Informationalism, Industrialism, Capitalism, the self in the informational society. Information technology paradigm. The historical sequence of the information technology revolution, models, actors and sites of the information technology revolution.	15
II.	IT revolution enterprise: the culture, institutions and organisations of the informational economy, transition from industrialism to informationalism i.e from mass production to flexible production.	15
III.	The transformation of work and employment : networkers, jobless and flexitimers. Postindustrialism, the service economy and the information society. The new occupational structures. The work process in the informational paradigm.	15
IV.	Is there a global labour force? Informational technology and the restructuring of capital-labour relationships, Social dualism or fragmented societies. Work from Home.	15
V.	The rise of media culture: The new media and the diversification of mass audience. Computer mediated communication, institutional control, social networks and virtual communities.	15

Suggested Readings:

Manuel, Castells, 1996, The Rise of Network Society, Blackwell, Publishers.

Mark, Taylor and Esa Saariner 1994 : Imagologies, Routledge, London.

December and Randall 1994 : The World Wide Web- Unleashed, Macmillan Computer Publishing.

Mischael H 1993: The Metaphysics of Virtual Society, OUP, London. Sociology

Verena A Conley 1993 : Rethinking Technology, Minneapolis university of Minnesota press.

P Zrkoczry, N Heap Information Technology, Pitman.

Arvind Singhal and Rogers Everett : India's Communication Revolution From Bullok Carts to Cyber Mart, Sage Publications.

Hhatnagar, Subhash 2000 : Information and Communication: Technology in Development, Sage Publication

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Melkote Shrinivas 2001 : The Information Society Leslies H Steves
 Barrie Axford and Richard Hoggan, (ed) 2001 : New Media and Politics. Sage, India.
 P.Preston, 2001 : Reshaping Communications – Technology Information and social Change. Sage Publications : New Delhi
 Joana Yates and John Van, Mannen, 2001 – Information Technology and Organisational Transformation. Sage, India

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:

Suggested Continuous Internal Evaluation Methods (25 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz

Course prerequisites: To study this course, a student must have had the subject Sociology in the class Bachelor.

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

Further Suggestions:

Program/Class: M. A.	Year : I	Semester: I
Subject : Sociology		
Course Code : A070-08 P	Course Title : Project Presentation on Urban Sociology	
Course Outcomes : Urban population in India is growing very rapidly in the last 2/3 decades. Urban growth has also its accompanying social problems. The course is aimed to sensitize the student to the urban intricacies of India. In addition to gaining proficiency in concepts prevalent in a wide range of urban research, students will be trained competently towards undertaking professional research, consultancy, governmental and non-governmental work, urban policy.		
Credits : 5	Project Presentaton : Elective	
Maximum Marks: 50+50	Min. Passing Marks : 33	
Total No. of Lectures- Tutorials-Practicals(in hours per week) : L-T-P : 5-0-0		

Unit	Topics	No. of Lectures
I.	Nature and Scope; Approaches to Study Urban Society: Weber, Murnford, Park, and Giddles.	15
II.	Concept of City; Urbanism as a Way of Life; Urban Culture; Metropolis, Megalopolis and Global Cities;	15
III.	Gentrification; Types and Growth of Cities: Concentric Zone Theory, Sector Theory, and Multiple Nuclei Theory..	15
IV.	Urbanization: History, Trends, Factors, and Social Consequences. Urban Growth in India: Trends, Migration & Social Mobility, Urban Renewal, and Urban Policy & Planning	15

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V	Caste and Class in Indian Cities; Changing Aspects Urban Family in India; Urban Poverty; Social Structure of Urban Slums in India; Urban Violence; Problems of Housing, Pollution and Environment; City Governance and Management.	15
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Suggested Readings:

Anderson, N. and Lindeman, E. C. 1928. Urban Sociology, New York: Free Press.

Bose, A. 1973. Studies in Indian Urbanization 1901-1971, Bombay: Tata McGraw-Hill.

Burgess, E. W. 1926. The Urban Community, Chicago: Chicago University Press.

Gugler, J. 2004. World Cities beyond the West: Globalization, Development and Inequality, Cambridge: Cambridge University Press.

Hansen, T. B. 2001. Urban Violence in India: Identity, Politics, Delhi: Permanent Black.

Mumford, L. 1938. The Culture of Cities, New York: Free Press.

Quinn, J. A. 1953. Urban Sociology, New Delhi: S. Chand & Co.

Park, R. F. Burgess, E. W. McKenzie, 1925. The City, Chicago: Chicago University Press.

Patel, S. and Deb, K. 2006. Urban Studies, New Delhi: Oxford University Press.

Pickvance, C. J. Urban Sociology, London: Methuen & Co. Ltd.

Ramchandran, R. 1988. Urbanization and Urban Systems in India, New Delhi: Oxford University Press.

Rao, M.S.A. 1974. Urban Sociology: A Reader, New Delhi: Tata McGraw-Hill.

Sassen, S. 1991. The Global City. New York, London, Tokyo, Princeton: Princeton University Press.

Sivranakrishnan, K. C., Kundu, A. and Singh B. N. 2005. Handbook of Urbanization in India, New Delhi: Oxford University Press.

Thornlinson, Ralph. 1969. Urban Structure: The Social and Spatial Character of Cities, New York: Random House.

Weber, M. 1966. The City, London: Free Press.

Zukin, S. 1995. Cultures of Cities, Oxford: Blackwell

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:

Suggested Continuous Internal Evaluation Methods (50 Marks).

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz

Course prerequisites: To study this course, a student must have had the subject Sociology in the class Bachelor.

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

Further Suggestions:

Program/Class: M.A.	Year: I	Semester: I
Subject: Sociology		
<p>Course outcomes: This course will help students to understand Tribal Society. Students get to know about the concept, classification, culture, beliefs, religion, customs, institutions as well as social problems, changes and mobility prevalent among the tribes and scheme of tribal development.</p>		

15 

Course Code: A070-09P	Course Title: Project Presentation on Tribal Studies
Credits: 5	Project Presentation : Elective
Max. Marks: 50 – 50	Min. Passing Marks: 33

Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 5-0-0

Unit	Topics	No. of Lectures
I	Classification of Indian Tribes. Ethnological Theories of Cultural Growth- Evolution(Morgan,Tylor) Diffusion(Boas,Smith Schmidt) Structural-Functional(Malinowski,RedcliffBrown)Configuration and Pattern of Culture(Benedict,Mead) Acculturation, Innovation; Cultural Relativism.	20
II	Religion, Magic and Totemic: Theories of Origin of Primitive Religion, Kinds of Magic, Origin and kinds of Totem, Role of Religion, Magic and Totem in tribal Society.	15
III	Primitive Social Organization: Family and Marriage in Simple Society Status of Woman, Youth Dormitory: their origin, Structure, Relevance. Cultural contact and its impact on youth Dormitory.	20
IV	Primitive Economy and Mode of Production: Characteristics. Various Types of Exchanges, Reciprocity and Redistribution. Primitive Law and Polity: Nature of Primitive Law, Justice and Forms of Governance.	20

Suggested Readings:

Singh, K S.: Tribal Society in India. (Vols.)

Vidyarthi, L.P and Rao: the Tribal culture of India.

Nadeem Hasnain: Janjatiya Bharat.

Jha, Makhan: Anthropological thought.

Majumdar and Madan: An Introduction of Social Anthropology.

Madan and Sarana (ed): Indian Anthropology: Essays in Memory of D.N. Majumdar.

Brown, Radcliffe: Structure and Function in Primitive society.

Bailey, F.G.: Tribe, Caste Nation.

Firth, Raymond. Human Types.

Herskovits: Cultural Anthropology.

Malinowski: The Scientific Theory of Culture.

Herskovits: Acculturation: The Study of Culture Contacts

Coon (eds): A Reader in General Anthropology.

Madan and Majumdar: Social Anthropology. Essays in Memory of D.N. Majumdar.

Bala Ratanam (ed.): Anthropology on the March.

L.P. Vidyarthi: Social Anthropology in India. A Social Orientation

Abbi & Saberwar (eds.): Urgent Researches in Social Anthropology.

Hammond, Peter B. (eds): Selected Researches in Social Anthropology.

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:

Suggested Continuous Internal Evaluation Methods (50 Marks):

- Seminar/Assignment on any topic of the above syllabus
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz.

Course prerequisites: To study this course, a student must have had the subject Sociology in the class of Bachelor.

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

Further Suggestions:

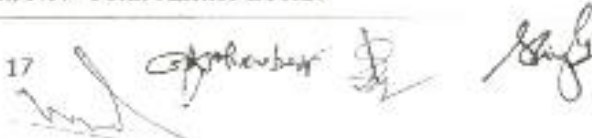
SEMESTER II (YEAR I)

Program/Class : M.A.	Year: I	Semester: II
Subject: Sociology		
Course Code: A070-01T	Course Title : Advanced Sociological Theory	
Course outcomes:		
Credits: 5	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks: 33	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 5-0-0		

Unit	Topics	No. of Lectures
I.	The nature of Sociological Theory, Micro and Macro Sociological Analysis. Max Weber and Talcott Parsons: Social Action-Social System-Pattern Variables	12
II.	Structural Functionalism – Redcliff Brown, Malinowski, Robert K. Merton: Theory of Middle Range, Manifest and Latent Functions- Anomic and Reference Group Theory, Anomic.	15
III.	C.W.Mills - Theory of Conflict I. Coser – The Functions of Social Conflict; R. Dahrendorf – Theory of Class Conflict;	12
IV.	C.H.Cooly, G.H.Mead and Herbert Blumer-Symbolic Interactionism	12
V.	George C. Homans and Peter M Blau -Theory of Social Exchange.	12
VI.	Structuralism: L. Strauss and E. Leach; Role & Structure: S. F. Nadel.	12

Suggested Readings:

- Aron, R. 1970. Main Currents in Sociological Thought, Vol. II. Harmondsworth: Penguin.
Bendix, R. 1962. Max Weber: An Intellectual Portrait. New York: Anchor Books.

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- Benton, T. 1977. Philosophical Foundation of the Three Sociologies, London: Routledge and Kegan Paul.
- Coser, L. A. 1977. Masters of Sociological Thought, New York: Harcourt Brace.
- Black, Max (Ed.) 1961. The Social Theories of Talcott Parsons: A Critical Examination, NJ: Prentice-Hall.
- Hummel, H. 1969. Symbolic Interactionism, N.J.: Prentice Hall.
- Blau, P. M. 1964. Exchange and Power in Social Life, New York: Wiley
- Collins, R. 1975. Conflict Sociology: Toward an Explanatory Science, New York: Academic Press
- Coser, L. 1956. The Functions of Social Conflict, New York: The Free Press.
- Coser, Lewis, A. 1979. Masters of Sociological Thought, New York: Harcourt Brace
- Dahrendorf, R. 1959. Class and Class Conflict in Industrial Society, London: Routledge and Kegan Paul.
- Fletcher, Ronald. 1971. The Making of Sociology: Developments, Vol. II, London: Nelson.
- Giddens, A. 1973. Capitalism and Modern Social Theory: An analysis of Writings of Marx, Durkheim and Weber, London: Cambridge University Press.
- Homans, G. H. 1961. Social Behavior: It's Elementary Forms, New York: Harcourt Brace.
- Levi-Strauss, C. 1949. Elementary Structure of Kinship, Paris
- Levi-Strauss, C. 1963. Structural Anthropology, New York: Basic Books.
- Mannheim, K. 1936. Ideology and Utopia, London: Routledge and Kegan Paul.
- 1952. Essays in the Sociology of Knowledge, London: Routledge and Kegan Paul.
- Mead, G. H. 1962. Mind, Self and Society: From the Standpoint of a Behaviorist, Chicago: Chicago University Press.
- Merton, R.K. 1968. Social Theory and Social Structure, New York: Free Press.
- Parsons, T. 1951. Social System, New York: The Free Press.
- Parsons, T. and Shils, E. A. & others (Eds.). 1951. Toward a General Theory of Action, Cambridge (Mass.): Harvard University Press.

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:

Suggested Continuous Internal Evaluation Methods (25 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz

Course prerequisites: To study this course, a student must have had subject Sociology in the class of Bachelor.

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

Further Suggestions:

Program/Class: M.A.	Year : I	Semester. II
Subject : Sociology		
Course Code : A070-02T	Course Title : Methods and Techniques of Social Research	
<p>Course Outcomes : To provide students with an orientation to Qualitative and Quantitative Social Research To acquaint students with the important concepts, techniques and processes in qualitative and Quantitative research. To guide students to work on meaningful, minor research projects.</p>		

Credits : 5	Core Compulsory
Maximum Marks: 25+75	Min. Passing Marks : 33
Total No. of Lectures- Tutorials - Practicals (in hours per week) : L-T-P : 5-0-0	

Unit	Topics	No. of Lectures
I.	Research Design: Descriptive, Exploratory, Explanatory (Experimental), and Diagnostic; Sampling: Population & Sample, Sample Size, Probability and Non-probability Sampling Designs, Sampling Error.	15
II.	Qualitative Research Techniques: Observation & Participant Observation, Qualitative Interview, Case Study Method, life History, Oral History, Content Analysis, Genealogy, and Encounters & Experiences in Field Work. Ethnography, Narratives., Grounded Theory, Triangulation.	15
III.	Quantitative Research Techniques: Interview Schedule & Questionnaire, Census, National Sample Survey, Problems of Quantification & Measurement; Reliability & Validity;	15
IV.	Scaling in Social Sciences: Sociometry, the Social Distance Scale, and the Likert Scale. PRA, RRA, Action Research	15
V.	Statistical Analysis in Sociology: Measures of Central Tendency, Dispersion, Correlation; Test of Significance: Chi Square Test and T Test; Standard Deviation- Regression, Use of Computer in Social Science Research.	15

Suggested Readings:

- Beteille, A and T.N.Madan (1975) Encounter and Experience; Personal Accounts of Fieldwork. New Delhi, Vikas Publishing House.
- Blalock, J.R. and Hubert, M (1981) Social Statistics, Washington, Mc Graw Hill, International Editions.
- Boalt, Gunnar (1969) The Sociology of Research, London, Southern Illinois University Press.
- Bryman, Alan (1988) Quality and Quantity in Social Research, London. Unwin Hyman.
- Clifford, Girtz and Marcus, George E. (eds.) 1986. Writing Culture. The Poetics and Politics of Ethnography. Berkeley: University of California Press.
- Gane, Mike (1988) On Durkheim's Rules of Sociological Method, London, Routledge.
- Goode, Williams and Hatt Paul. (1981) Methods in Social Research, London, McGraw Hill Book Company.
- Hunt, Morton. (1920) Profiles of Social Research, New York, Russel Sage Foundation.
- Jayaram, N (1989) Sociology: Methods and Theory, Madras. Macmillan.
- Kothari, C.R. (1985) Research Methodology- Methods and Techniques, Madras, Wiley Eastern Limited
- (1989) Research Methodology- Methods and Techniques, Bangalore, Wiley Eastern Limited -----(1978) Quantitative Techniques, New Delhi, Vikas Publishing House (Pvt) Ltd.
- Mitchell, Mark and Jannina Jolley (1988) Research Design Explainer, New York, Holt, Rinehart and Winston inc.
- Michael S Lewis- Beck (Ed.) (1990) Experimental Design & Methods, U.K. Sage Publications.
- Punch, Keith (1996) Introduction to Social Research, London, Sage.
- Srinivas, M.N. and A.M.Shah (1979) Fieldworker and The Field. Delhi, Oxford
- Young, P.V. (1988) Scientific Social Surveys and Research. New Delhi: Prentice Hall.

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:

Suggested Continuous Internal Evaluation Methods (25 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions
- Research Orientation of the student.
- Quiz

Course prerequisites: To study this course, a student must have had the subject Sociology in the class Bachelor.

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

Further Suggestions:

Program/Class: M.A.	Year: I	Semester: II
Subject : Sociology		
Course Code : A070-03T	Course Title : Rural Sociology	
Course Outcomes : The course is designed to provide an overview of the rural social reality with emphasis on the changing nature of the rural society, to understand the factors responsible for the changing nature of the rural society and the approach of the Government to deal with rural issues and crisis.		
Credits : 5	Core Compulsory	
Maximum Marks: 25 + 75	Min. Passing Marks : 33	
Total No. of Lectures- Tutorials-Practicals(in hours per week) : 5 - T - P		

Unit	Topics	No. of Lectures
I.	Approaches to Study Rural Society in India: Rural-urban Continuum; Peasant Society and Folk Culture; Little Tradition and Great Tradition; Universalization and Parochialization; Debates on the Mode of Production and Agrarian Relations.	15
II.	Indian Village: Self-sufficiency; Socio-cultural Dimensions; Rural Social Structure, Agrarian Relations, Caste, Jajmani, Joint Family, and Power Structure.	15
III.	Rural Planning and Reconstruction in India. Land Reforms, Community Development Programme, Green Revolution, Panchayat Raj, IRDP and other current Planned Programmes for Rural Development- MNREGA.	15
IV.	Rural Poverty; Pauperization and Depeasantization; Agrarian Unrest and Peasant Movements; Trends of Change in Village India.	15
V.	Impact of Urbanization, Technology and Globalization; Rural Social Mobility; Agrarian Distress.	15

Suggested Readings:

Betille, Andre. 1974 Six Essays in Comparative Sociology, New Delhi: Oxford University Press.

Chauhan, B. R. 2003. Village Community, in Veena Das, The Oxford India Companion to Sociology and Social

Anthropology, New Delhi: Oxford University Press.

----- 1990. Rural Urban Articulations, Udaipur: A. C. Brothers.

Desai, A. R. 1977. Rural Sociology in India, Bombay: Popular Prakashan.

----- 1979. Rural India in Transition, Bombay: Popular Prakashan.

Dube, S. C. 1955. India's Changing Villages, London: Routledge and Kegan Paul.

Dhanagare, D. N. 1988. Peasant Movements in India, New Delhi: Oxford University Press.

Joshi, P. C. 1976. Land Reforms in India: Trends and Perspectives, Bombay: Allied Publishers.

Majumdar, D. N. 1955. Rural Profiles, Lucknow: Ethnographic and Folk Culture Society.

Marrist, M. (Ed.). 1955. Village India, Chicago: Chicago University Press.

Marchet, J.P. 1983. Social Anthropology of Peasantry, Part III, New Delhi: Oxford University Press.

Ommer, T. K. 1971. "Green Revolution and Agrarian Conflict". Economic and Political Weekly, 6(26): 99-103.

Radhakrishnan, P. 1989. Peasant Struggles: Land reforms and Social Change in Malabar 1836 - 1982, New Delhi: Sage Publications.

Redfield, R. 1956. The Little Community, Chicago: Chicago University Press.

Srinivas, M. N. (Ed.). 1955. India's Villages, Calcutta: Government of West Bengal Press.

----- 1996. Village, Caste, Gender and Method: Essays in Indian Anthropology, New Delhi: Oxford University Press.

Thorner, Daniel and Thorner, Alice. 1962. Land and Labour in India, Bombay: Asia Publications.

Wiser, W. H. 1936. The Hindu Jajmani System, Lucknow: Lucknow Publishing House.

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:

Suggested Continuous Internal Evaluation Methods (25 Marks).

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz.

Course prerequisites: To study this course, a student must have had the subject Sociology in the class Bachelor.

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

Further Suggestions:

Program/Class: M.A.	Year: I	Semester: II
Subject : Sociology		
Course Code : A070804 T	Course Title : Computer Application in Social Research	
Course Outcomes : The course is aimed at presenting a comprehensive, integrated and empirically-based profile of Indian society. The focus is on the contemporary Indian society. It is presumed that student will become familiar with intricacies of contemporary Indian Society.		
Credits : 5	Generic Elective	
Maximum Marks : 25 + 75	Min. Passing Marks : 33	
Total No. of Lectures- Tutorials-Practicals(in hours per week) : L-T-P : 5 - T - P		

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Unit	Topics	No. of Lectures
I	Fundamentals of Computer, Hardware and Software, Different Operating System, Application Programmes, Programming language concepts.	15
II	Word Processing: Introduction to Word Processing, MS-Word creation of Files, arrangement of files in folders, saving document as files. Print, formatting, inserts, page layout, References-Citation and Bibliography. Review (comments, tracking, compare). Converting to PDF.	15
III	Spreadsheet Tools : Introduction to spreadsheet application, Features and Functions. Data sorting, Features of Statistical Data Analysis. Generating Charts/Graphs and other features. Tools used may be MS-Excel, open office or similar tools.	15
IV	Presentation Tools : Introduction to Presentation Tools- features and functions. Creating, Customizing and showing Presentation. Tools used may be MS-Power Point, open office or similar tools.	15
V	Web Search : Introduction to Internet, use of Internet and www using search engine like Google, Bing, Yahoo etc. using advance search techniques. Use of Internet in Research activities. submission of paper in archive Electronic Mail System. Cyber Law.	15

Suggested Readings:

1. Priti Sinha, Pradeep K. Sinha : Computer Fundamentals: Concepts, Systems & Applications, BPP Publications.
2. Priti Sinha, Pradeep K. Sinha : Computer Fundamentals(Hindi), BPP Publications.
3. V.Rajaraman & Neelrika Adabala : Fundamentals of Computers, Prentice Hall.
4. Reema Thareja : Fundamentals of Computers, OUP.
5. Naranjan Shrivastava : Fundamentals of Computers and Information System. Dreamtech Press.
6. Anita Goul : Computer Fundamentals, Pearson.

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:

Suggested Continuous Internal Evaluation Methods (50 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz

Course prerequisites: To study this course, a student must have had the subject Sociology in the class of Bachelor.

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

Further Suggestions:

Program/Class: M.A.	Year: I	Semester: II
Subject : Sociology		
Course Code : A070-05T	Course Title : Social Work	
Course Outcomes :		
Credits : 5	Generic Elective	
Maximum Marks: 25 + 75	Min. Passing Marks : 33	
Total No. of Lectures- Tutorials - Practicals(in hours per week) : L-T-P : 5 - T - P		

Unit	Topics	No. of Lectures
I	Social Work and related concepts : Social Work, Social Service, Social Welfare, Social Reform, Social Justice and Human Rights.	15
II	Social Work : Meaning, Definitions, Objectives and Assumptions. Social Work : Principles, Values and Philosophy. Social Work and its relation with other Social Sciences.	15
III	History of Professional Social Work in India. Voluntarism and Gandhian Social Work.	15
IV	Unit of Social Work : Individual, Family, Group, Community and Society. Social Work Practice Methods- Direct Method and Indirect Method. Direct Method-Social Case Work, Social Group Work and Community Organization. Indirect Method-Social Welfare Administration and Social Action.	15
V	Professional Social Work – Profession, Professionalism and Professionalization- Meaning, Definition and Characteristics. Professional Attributes in Social Work, Skills for Social Work Professionals. Role and Functions of Professional Social Worker.	15

Suggested Readings:

1. Kripal Singh Sudan: Samaj karya: Sidhant evam abhyas, N.S.Publication, Lucknow.
2. Bhattacharya, S. (2004). Social work: An integrated approach. New Delhi: Deep & Deep Publications
3. Brenda Dubois and Kalra, (2002). Social-Work an Empowering Profession, Keogrud Miley
4. Desai, Muli, 2006. Ideologies and social Work: Historical and Contemporary analyses. Rawat Publication, New Delhi
5. Diwakar, V. D. (1991) Social Reform Movement in India, Mumbai: Popular Prakashan
6. Gold Hegg EM (1979). Ends and Means in Social Work, Allen and Unwin, London
7. Heun, Linda R., Heun, Richard E. (2001) Developing Skills for Human Interaction, London : Charles E. Merrill Co
8. Joyce, Lishman (1994) Communication in Social Work, New York: Palgrave
9. Rao, MSA (1979) Social Movements in India, New Delhi : Vol. 1 and 2, Manohar
10. Reamer & Fredric (2005) Social Work Values and Ethics, New Delhi : Rawat Publication
11. Singh, D. K. and Bhartiya, A.K. (2010). Social Work: Concept and Methods. Lucknow: New Royal Book Company.
12. Surendra Singh (Chief Editor) (2012): Encyclopedia of Social work in India. Lucknow: New Royal Book Company.
13. Friedlander, Walter A. (1977) Concepts and Methods of Social Work, New Delhi: Prentice Hall of India Pvt. Ltd.
14. Batra, Nitin (2004) Dynamics of Social Work in India, Jaipur: Raj Publishing House
15. Compton, B. R. (1980). Introduction to Social Welfare and Social Work. Illinois: The Dorsey Press.
16. O' Hagan, Kieran, Kingsley, Jessica (2003) Competence in Social Work Practice- A Practical Guide for Professionals, London
17. Rameshwari, Devi and Ravi Prakash (2000) Social Work Practice, Jaipur. Mangal Deep Publications
18. Wadia, A. & Hornasji, N. (1968). History and Philosophy of Social Work in India (2nd ed). Bombay: Allied

Publishers.

This course can be opted as an elective by the students of following subjects: Open for all

- Suggested Continuous Evaluation Methods:**
Suggested Continuous Internal Evaluation Methods (50 Marks):
- Seminar/Assignment on any topic of the above syllabus.
 - Test with multiple choice questions / short and long answer questions.
 - Research Orientation of the student.
 - Quiz

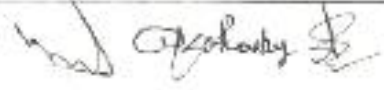

Course prerequisites: To study this course, a student must have had the subject Sociology in the class of Bachelor.

Suggested equivalent online courses:
IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

Further Suggestions:

Program/Class: M.A.	Year : I	Semester: II
Subject : Sociology		
Course Code : A070-06T	Course Title : Industrial Psychology	
Course Outcomes :		
Credits : 5	Generic Elective	
Maximum Marks: 25 + 75	Min. Passing Marks : 33	
Total No. of Lectures- Tutorials-Practicals (in hours per week) : L-T-P : 5 – T - P		
Unit	Topics	No. of Lectures
I	Introduction to Industrial Psychology and its Basic Concepts. Scientific Management. Work study, Human Relations Approach and Hawthorne Experiments.	15
II	Job Analysis, Job Recruitment and Selection, Psychological Test,	15
III	Motivation and Morale. Attitude and Job Satisfaction. Group Dynamics, Organisational Culture. Work Environment. Fatigue, Monotony and Boredom.	15
IV.	Stress Management, Personnel Counselling, Supervision and Leadership.	15
V.	Performance Management and Appraisal, Training and Development. Accident and Safety.	15

- Suggested Readings:**
1. P.K.Ghosh & M.B.Ghorpade : Industrial Psychology, Himalaya Publishing.
 2. Ankur Negi: Industrial Psychology,CBS.
 3. Dipak and Sutapa Bhattacharya : Industrial Psychology, Univ.Press.

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4. E. Aronson: Social Psychology, Pearson.
5. Dr. C.B. Gupta : Human Resource Management, Sultan and Sons.
6. P. Subba Rao : Personnel & Human Resource Management, Himalaya Publishing House
7. K. Aswathappa : Human Resource and Personnel Management, Tata Mc Graw Hill Publishing Co. Ltd.
8. C.S. Venkata Ratham & B.K. Srivastava : Personnel Management & Human Resources, TMPL.
9. Dr.C.B. Memoria, Dr. Satish Memoria &S.V. Gankar : Dynamics of Industrial Relations ,Himalaya Publishing House.
10. Performance Appraisal, Theory and Practice - AIMA - Vikas management Series, New Delhi - 1986.
11. Pattanayak : Human Resource Management, PHI,2002
12. C.B.Mamoria: Personnel Management, Himalaya Publishing.
13. Albert Walton and Bruce V Moore: The Fundamentals of Industrial Psychology,LLC.
14. Arun.K.Singh : Social Psychology,PHI.

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:

Suggested Continuous Internal Evaluation Methods (25 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz

Course prerequisites: To study this course, a student must have had the subject Sociology in the class of Bachelor.

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

Further Suggestions:

Program/Class: M.A.		Year : I	Semester: II
Subject : Sociology			
Course Code : A070-07T		Course Title : Human Resource Management	
Course Outcomes :			
Credits : 5		Generic Elective	
Maximum Marks: 25 + 75		Min. Passing Marks : 33	
Total No. of Lectures- Tutorials-Practicals(in hours per week) : L-T-P : 5 – T - P			
Unit	Topics	No. of Lectures	
I	Human Resource Management - Definition - Objectives - Functions – Scope-Importance.Theories of HRM. HRM in India-Evolution of HRM	15	
II	Human Resource Planning - Job Analysis, Job description and Job Specification. Recruitment and Selection - Sources of Recruitment. Selection Process. Test Types - Interview Types. Career Planning vs Man Power Planning and succession Planning - Career Planning - Process - Career Development - Placement and Induction.	15	
III	Training-Methods of Training, Executive Development . Performance Appraisal - Methods of Performance Appraisal , Transfers, Promotion.	15	

IV.	Wage & Salary Administration - Wage Boards and Pay Commission. Wage Incentive, Fringe Benefits Employees Welfare - Safety and Health Measures. Grievance Procedures. Redressal of Grievances. Ethics, Justice and Fair treatment in HRM.	15
V.	Industrial Relations - Meaning & Characteristics, Industrial Relations - Parties to Industrial relations . Nature of Trade Unions - Problems of Trade Union . Measures to Strengthen Trade Union Movement in India. Industrial Disputes- Causes for Industrial Disputes, Settlement of Industrial Disputes.	15

Suggested Readings:

1. Seema Sanghi : Human Resource Management 2011 Macmillan Publication.
2. V.S.P. Rao : Human Resource Management 2006, Excel Books
3. K. Ashwathappa : Human Resource Management 2007 Tata McGraw--Hill
4. Gary Dessler, Biju Varkey : Human Resource Management 2016 Pearson Publication, 12th Edition
5. Ronald J. Burke Cary L. Cooper - Reinventing Human resources Management: Challenges and new Directions, 2005 Routledge Place of Publishing London
6. Pravin Dixvi : Human Resource Management, Pearson Publication.
7. Mamoria and Gankar : Human Resource Management, Himalaya Publishing House.
8. Biswajeet Pattarayak : Human Resource Management, PHI Learning
9. U.K.Haldar : Human Resource Management, Oxford University Press.
10. P.Jyothi and D.N.Venkatesh : Human Resource Management, Oxford University Press.
11. Tanuja Agarwal : Strategic Human Resource Management, OUP.

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:

Suggested Continuous Internal Evaluation Methods (50 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz

Course prerequisites: To study this course, a student must have had the subject Sociology in the class of Bachelor.

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

Further Suggestions:

Program/Class: M.A.	Year: I	Semester: I
Subject : Sociology		
Course Code : A070-08P	Course Title : Contemporary Indian Society and Culture	
Course Outcomes : The course is aimed at presenting a comprehensive, integrated and empirically-based profile of Indian society. The focus is on the contemporary Indian society. It is presumed that student will become familiar with intricacies of contemporary Indian Society.		
Credits : 5	Project Presentation : Elective	

Maximum Marks: 25 + 25 = 50 + 50

Min. Passing Marks : 33

Total No. of Lectures- Tutorials-Practicals(in hours per week) : L-T-P : 5 - 0 - 0

Unit	Topics	No. of Lectures
I.	Features of Contemporary Indian society and Culture; Influence of the West, Islam and Globalization on Indian Society; Continuity and Change.	15
II.	Current Debates: Contextualization; Indigenization; the Use of Native Categories in the Analysis of Indian Society; Text and Context; Sociology for India.	15
III.	Class Structure in India: Agrarian and Industrial; the Emergence and Role of Middle Class in India; the New Indian Elite; Identity & Ethnic Assertions.	15
IV.	Caste and Politics; Dalit Consciousness; Communalism, Religious Revivalism; Problems of Minorities; Empowerment of Women	15
V.	Convergence and integration: the sharing of material traits, cultural space, language and regional ethos; the evolution of composite cultural legacy; change and transformation in Indian society; nation-building and national identity.	15

Suggested Readings:

Bose, N.K. 1967, Culture and Society in India. Bombay : Asia Publishing House

Bose, N.K. 1975 : Structure of Hindu Society. New Delhi.

Dube, S.C. 1990 : Society in India (New Delhi : National Book Trust)

Dube, S.C. 1995 : Indian Village (London : Routledge)

Dube, S.C. 1958 : India's Changing Villages (London : Routledge and Kegan Paul)

Karve, Irawati, 1961 : Hindu Society : An Interpretation (Poona : Deccan College) Sociology 22

Lannoy, Richard, 1971 : The Speaking Tree : A Study of Indian Society and Culture (Delhi : Oxford University Press)

Mandelbaum, D.G., 1970 : Society in India (Bombay : Popular Prakashan)

Srinivas, M.N., 1980 : India : Social Structure (New Delhi : Hindustan Publishing Corporation).

Srinivas, M.N., 1963 : Social Change in Modern India (California, Berkeley : University of California Press) Singh

Singh, Yogendra, 1973 : Modernization of Indian Tradition (Delhi : Thomson Press)

Uberoi, Patricia, 1993 : Family, Kinship and Marriage in India (New Delhi : Oxford University Press)

This course can be opted as an elective by the students of following subjects: Open for all**Suggested Continuous Evaluation Methods:**

Suggested Continuous Internal Evaluation Methods (50 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz

Course prerequisites: To study this course, a student must have had the subject Sociology in the class of Bachelor.**Suggested equivalent online courses:**

IGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

Further Suggestions:

Program/Class: M.A.	Year : I	Semester: II
Subject : Sociology		
Course Code : A070-09P	Course Title : Project Presentation on Issues and Problems of Indian Society	
Course Outcomes : The objective of this paper is to sensitize the students to the emerging social issues and problems of contemporary India, enable them to acquire sociological understanding of these issues and problems and empower them to deal with these issues and problems and serve as change agents, both in Governmental and non Governmental organizations.		
Credits : 5	Project Presentation : Elective	
Maximum Marks: 50 + 50	Min. Passing Marks : 33	
Total No. of Lectures- Tutorials-Practicals(in hours per week) : L-T-P :		

Unit	Topics	No. of Lectures
I	Problems of Development, Environmental and Ecological Degradation Corruption in public sphere.	15
II	Poverty, Caste and Gender discrimination, Problems of Religious, Ethnic, Regional Minorities, Backward classes and Dalits.	15
III	Dowry, Domestic violence, Divorce, Intra and Inter generational conflict, Problems of Elderly.	15
IV	Crime, Criminals and Delinquency, White Collar crime, Suicide.	15
V	Drug addiction, Terrorism, Cyber crime,	15

Suggested Readings:

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:

Suggested Continuous Internal Evaluation Methods (50 Marks):

- Seminar/Assignment on any topic of the above syllabus.
- Test with multiple choice questions / short and long answer questions.
- Research Orientation of the student.
- Quiz.

Course prerequisites: To study this course, a student must have had the subject Sociology in the class of Bachelor.

Suggested equivalent online courses:

RIGNOU & Other centrally/state operated Universities / MOOC platforms such as "SWAYAM" in India and Abroad.

Further Suggestions:

DEPARTMENT OF PSYCHOLOGY
DR. RAM MANOHAR LOHIYA AVADH UNIVERSITY
AYODHYA- 224001



POST GRADUATION (PG) SYLLABUS
ACCORDING TO NATIONAL EDUCATION POLICY (NEP) 2020

Department of Psychology

Dr. Rammanohar Lohiya Avadh University, Ayodhya-224001

Board of Studies

1. Dean, Faculty of Arts and Humanities. (Dr. R. L. Avadh University, Ayodhya)

Chugh

2. Prof. Pranay Kumar Tripathi, Convenor, (K.S. Saket P.G. College, Ayodhya).

Pranay

3. Prof. Shailendra Prasad Pandey (Sant Tulsidas P.G. College, Kadipur, Sultanpur).

Shailendra P.

4. Dr. (Smt) Mamta Sharma (L. B. S. P.G. College, Gonda).

Mamta Sharma

5. Prof. Rajendra Prasad Singh (M.G.K.V. Varanasi).

R.P. Singh

6. Prof. R.N. Singh (BHU, Varanasi).

R.N. Singh

7. Prof. O. P. Chaudhary (Shri Agrasen Kanya P.G. College, Varanasi).

O.P. Chaudhary

8. Dr. Jagdeesh Singh Dixit (Retd), (T.D. College, Jaunpur).

J.S. Dixit

9. Prof. Udyan Mishra (Principal, L.B.S. P.G. College, Mughalsarai, Chandauli).

Absent

10. Dr. Susheela Rai (Retd), (Dr. RML College Bhairav Talab, Varanasi), Special invited.

Absent

M.A. First Semester

Core: Foundation of Cognitive Psychology

Core: Research Methodology

Core: Classical Theories of Personality

First Elective: Biological Bases of Behaviour or History of Psychology

Second Elective: Practical or Field visit/ Project Presentation

List of Practicals-

1. Semantic Memory
2. Short-Term Memory
3. Episodic Memory
4. Sustained Attention
5. Construction of Interview schedule/Questionnaire
6. Planning a correlational study/ Cross-sectional study
7. Formulation of Plan of Action Research
8. Personality Dimension Test (S.P. Kulshreshtha)
9. Eysenck Personality Questionnaire (EPQ).
10. Sat Raj Tam (SRT) Personality Test
11. Sleep disorder
12. Health impact of drug addiction.

Note: Any one Practical form each Paper

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M.A. Second Semester

Core: Processes of Cognitive Psychology

Core: Experimental Design and Statistics

Core: Modern Theories of Personality

Third Elective: Environmental Psychology or Health Psychology

Fourth Elective: Practical or Industrial Training/ Project presentation

List of Practicals-

1. Selective attention
2. Span of attention
3. Chunking
4. Set in perception/ problem solving
5. Planning experimental study: Based on one way ANOVA design
6. Planning experimental study: Based on two way ANOVA design
7. Non-parametric statistics (Any two from syllabus)
8. Multiple Regression Analysis
9. Cattells 16 PF Test
10. NEO-PI-R (FFI) Test
11. Thematic Apperception Test (TAT)/Rorschach Test
12. Environmental Stress
13. Environmental Perception
14. Spatial Cognition
15. Health Beliefs
16. Gender and Health
17. Pathogenic health habits

Note: Any one Practical form each Paper

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M.A. Third Semester

Core: Advanced Social Psychology

Core: Psychological Assessment

Core: Mental Disorder

Fifth Elective: Clinical Psychology or Organizational Behaviour

Sixth Elective: Practical/ Study Tour or Project Presentation/ Test construction

List of Practicals-

1. Study of Social Problems
2. Interpersonal attraction
3. Level of Aspiration
4. Replication of any social experiment
5. Test/scale construction using factor analytic approach
6. Test/scale construction using Item analytic approach
7. Test/scale construction using Empirical approach
8. Test Adaptation
9. Psychometric evaluation of a test/scale
10. Psychological assessment in any specific setting (clinical, organization, educational etc.)
11. Measurement of Neuroticism
12. Measurement of depression
13. Mental health
14. Bender-Gestalt Test
15. Luria-Nebraska Test
16. Case study
17. Conflict resolution
18. Job involvement
19. Leadership
20. Functional Social support

Note: Any one Practical form each Paper

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M.A. Fourth Semester

Core: Applied Social Psychology

Core: Psychological Measurement

Seventh Elective: Psychotherapeutic techniques or Human Resource Management

Research Project/Dissertation: Dissertation

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M.A. I Sem

Core: Foundation of Cognitive Psychology

Unit: I

Cognitive approach to Psychology: Origin and Current status of cognitive psychology.
Assumption of Cognitive Psychology.

Unit: II

Attention: Concept, Type and Theories; **Perception:** Concept, Space, Time and Movement
Perception: Approaches to Perception.

Unit: III

Memory: Concept; Types of Memory: Working Memory, Semantic Memory, Episodic Memory, Procedural Memory, Eye-Witness Memory, Flash-Bulb Memory, Traumatic Memory, False Memory.

Unit: IV

Decision Making and Problem-Solving: Models and Theories; **Reasoning:** Concept and Types; Language and Thought

References:

- Matlin, M.W. (1995). *Cognition*, (3rd Edition). Prism Books Bangalore.
- Baddeley, A. D. (1997). *Human memory: Theory and practice*. Psychology press.
- Baddeley, A. D., Eysenck, M. W., & Anderson, M. C. (2009). *Memory*. New York, NY.
- Smith, E. E., & Kosslyn, S. M. (2007). *Cognitive Psychology: Mind and Brain* (International Edition).
- Best, J. B. (1999). *Cognitive psychology* (5th Ed.). Belmont, CA: Brooks/Cole, Wadsworth.
- Dember, W. N., & Joel, S. Warm (1979), *Psychology of Perception* (3rd Ed). New York: Holt
- Solso, R.L. (2001). *Cognitive Psychology* (6th Eds). Singapore: Pearson Education.
- Kellogg, R.T. (1995). *Cognitive Psychology*. Sage Publication, Oaks.
- सिंह, ए० के०, (2017). *संज्ञानात्मक मनोविज्ञान* । एक्सोटिक इण्डिया प्रकाशन ।
- सिंह, आर० एन० एवम भारद्वाज, एस० एस० (2012). *उच्च प्रायोगिक मनोविज्ञान*. अग्रवाल पब्लिकेशन ।
- श्रीवास्तव, बी०, आनन्द, वी० एवम आनन्द बी०. (2019), *संज्ञानात्मक मनोविज्ञान*. मोतीलाल बनारसीदास पब्लिकेशन ।

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M.A. I Sem
Core: Research Methodology

UNIT: 1-

Psychological Research: Meaning, Nature and Characteristics. Major steps in Psychological Research, Research Problem, Hypothesis, Types of Psychological Research. Ethical issues in Psychological Research.

UNIT: 2-

Variable: Nature, Type and Control of relevant variable. Minimization of Error-Variance. Techniques of experimental manipulation, Relevant variables and their controls.

UNIT: 3-

Methods of Data Collection: Interview and Interview Schedule, Observation, Questionnaire, and Survey Methods.

UNIT: 4-

Sampling: Population and Sampling, Simple Random Sampling, Stratified Random Sampling, Cluster Sampling and Non-Probability Sampling- Quota and Purposive Sampling.

References:

- D'Amato, M. R. (1970). *Experimental psychology: Methodology, psychophysics and learning*.
- McGuigan, F. J. (1960). *Experimental psychology: A methodological approach*.
- Kerlinger, F. N. (1966). *Foundations of behavioral research*.
- त्रिपाठी, एल० बी० (2012). *मनोवैज्ञानिक अनुसंधान पद्धति*। राखी प्रकाशन
- कपिल, एच० के०. (2019). *अनुसंधान विधियाँ, व्यवहारपरक विज्ञानों में*। एच पी भार्गवा प्रकाशन।
- सिंह, आर० पी० एम भाटिया (2019). *आधुनिक सांख्यिकीय विधियाँ*, अग्रवाल पब्लिकेशन, आगरा।
- त्रिपाठी, जे० जी०. (2007). *मनोवैज्ञानिक अनुसंधान पद्धति*। एच पी भार्गवा प्रकाशन।
- सिंह, ए० के०. (2009). *मनोविज्ञान, समाजशास्त्र तथा शिक्षा में शोध विधियाँ*, मोतीलाल बनारसी दास पब्लिकेशन।
- श्रीवास्तव, डी० एन० (2020). *मनोवैज्ञानिक अनुसंधान एवं मापन*। श्री विनोद पुस्तक मंदिर प्रकाशन।

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M.A I Sem
Core: Classical Theories of Personality

UNIT: 1-

Personality: Nature and Scope, Various Theoretical Approaches to Personality. Determinants of Personality: Biological and Physiological, Psychological & Environmental.

UNIT: 2-

Eastern Personality Theory: Personality in Upnishads, The Sankhya Theory of Personality, Yoga Theory of Personality, Abhidhamm Theory of Personality. Comparative Study of Eastern and Western Theories of Personality.

UNIT: 3-

Psychodynamic Theory: Freud's Psychoanalytic Theory, Jung's Analytical Theory and Adler's Individual Theory.

UNIT: 4-

Neo-Freudian and Post-Freudian Approaches: Horney, Erich Fromm, Erikson and Sullivan.

References:

- Cloninger, S.C. (2012). *Theories of Personality*. Mc Grahill.
- Larsen, R.J. & Buss, D.M. (2013). *Personality Psychology*. Willey, New York.
- Fiest, J. & Feist, G.J. (2009). *Theories of Personality*. Mc Grahill.
- Cervone, D. & Lawrence, P.A. (2013). *Personality Psychology*. Willey, New York.
- Hall, C.S., & Lindzey, G. (1970). *Theories of personality* (2nd Ed.) New York: John Wiley and Sons
- Ciccarelli, S. K., Misra, G., & White, J. N. (2006). *Psychology*. Pearson Education India.
- Schultz, D. P., & Schultz, S. E. (2016). *Theories of personality*. Cengage Learning.
- सिंह, ए० के० (2004). *व्यक्तित्व का मनोविज्ञान*। मोतीलाल बनारसी दास पब्लिकेशन।
- श्रीवास्तव, डी० एन०, (2004). *व्यक्तित्व मनोविज्ञान*, भार्गव प्रकाशन, आगरा।

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M.A. I Sem

First Elective: (A) Biological Bases of Behaviour

Unit: I

Biological Foundation of Psychology: Field of Study and Techniques of Research; Organization and Functions of Brain and Spinal Cord; Genetic Bases of Behaviour: Chromosome & Genes.

Unit: II

Neurophysiology: Neuron: Structure and Functions; Generation and Conduction of Action Potential; Synaptic Transmission and Neuromuscular Transmission.

Unit: III

Endocrine Glands and Hormones Products; Function of different hormones; Hormonal imbalance and behaviour.

Unit: IV

Sleep, Hunger and Thirst; Biological rhythms; State of sleep and disorder of sleep.

Unit: V

Drug and Behaviour: Determinants of Drug effects; Drug abuse and addiction.

References:

- Carlson, N. R. (2013). *Physiology of Behaviour*. NJ: Pearson Education Inc.
- Leukel, F. (1976). *Introduction to physiological psychology*. C. V. Mosby Co.
- Levitt, P.C. (1980). *Physiological Psychology*.
- Morgan, C.T. (1985). *Introduction to Physiological Psychology*. Mc Graw Hill Publication
- Pinel, J. P. (2013). *Biopsychology*. Pearson Higher Ed.
- Kalat, J. W. (2015). *Biological psychology*. Cengage Learning.
- Toates, F. (2011). *Biological psychology*. Prentice Hall/Pearson Education.
- Wickness, A. (2009). *Introduction to biopsychology*. New Jersey: Prentice Hall
- तिवारी, बी० डी० एवम त्रिपाठी ए० एन०. (2004). *दैनिक मनोविज्ञान*।
- सिंह, आर० पी० एवम उपाध्याय, जे० (2019). *दैनिक मनोविज्ञान*, अंकित प्रकाशन।

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First Elective: (B) History of Psychology

Unit: I

The Origin of Scientific Psychology: The Pre-experimental Period.

Unit: II

The first century of experimental psychology: Weber, Fechner, Helmholtz, Wundt & Galton

Unit: III

The Schools of Psychology: Structuralism, Functionalism, Behaviourism, Gestaltism, Psychoanalysis, Cognitive revolution.

Unit: IV

Psychological Thought in Some Major Eastern Systems: Bhagvad Gita, Buddhism, Sufism & Integral Yoga. Science and Spirituality (Avidya & Vidya), the primacy of Self knowledge in Indian Psychology.

References:

- Woody, W. D., & Viney, W. (2017). *A history of psychology: The emergence of science and applications*. Routledge Publication.
- Thomson, R. (1993). *The Emergence of Psychology*.
- Leaby, T. H. (2017). *A history of Psychology (8th Eds.)* Routledge Publication.
- Chaplin, J.P. & Kroweic, T.S. (1967). *System and theories of psychology*. Holt, Renehart & Winston Publication.
- Rao, K. R., & Paranjpe, A. C. (2016). *Psychology in the Indian tradition*. Springer India.
- सिंह, ए० के० (2013). *मनोविज्ञान के सम्प्रदाय एवं इतिहास*, मोतीलाल बनारसीदास प्रकाशन।
- शर्मा, जे० डी० (-----). *मनोविज्ञान का इतिहास*।
- पाण्डेय, आर० पी० (-----). *मनोविज्ञान का इतिहास*। राजकमल प्रकाशन

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M.A. I Sem

Second Elective: Practical or Field visit/ Project Presentation

Second Elective: Practical or Field visit/ Project Presentation

List of Practicals-

1. Semantic Memory
2. Short-Term Memory
3. Episodic Memory
4. Sustained Attention
5. Construction of Interview schedule/Questionnaire
6. Planning a correlational study/ Cross-sectional study
7. Formulation of Plan of Action Research
8. Personality Dimension Test (S.P. Kulshreshtha)
9. Eysenck Personality Questionnaire (EPQ).
10. Sat Raj Tam (SRT) Personality Test
11. Sleep disorder
12. Health impact of drug addiction.

Note: Any one Practical form each Paper

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M.A. II Sem

Core: Processes of Cognitive Psychology

Unit: I

Methods of Cognitive Psychology; New Direction in Cognitive Psychology; Basic Input, attentional Process; Signal Detection Theory.

Unit: II

Perceptual Process: Visual Perception and Visual Information; Visual Sensory Memory, Laws of Organization; Perception of subjective contours; non-veridical perception, Role of motivation and learning in perception.

Unit: III

Memory Process: Encoding, Storage & Retrieval; Stages of Memory- Sensory, Short-Term, Long-Term; Semantic Integration; Approaches to working memory; Models of Memory, Memory improvement.

Unit: IV

Steps in Problem Solving; Insight and analogy; means end analysis, Expert and novice problem solver, improving problem solving. Algorithm & Heuristics in Decision Making; Reasoning and Judgment; Language Processes, Acquisition, comprehensive production.

References:

- Matlin, M.W. (1995). *Cognition*. Prism Book, Bangalore.
- Baddley, A. (1977). *Human Memory*. Psy Press, New York.
- Anderson, J. R. (2004). *Cognitive psychology and its implications*. Worth Publishers..
- Gallotti, K.M. (2004). *Cognitive Psychology*. Pearson Education
- Sternberg, R. J. (2009). *Applied Cognitive Psychology: Perceiving, Learning and Remembering*.
- Solso, R.L. (2001). *Cognitive Psychology*. Pearson education.
- Howard, D.B. (1983). *Cognitive Psychology*. New York: Mc Millan
- Schiffman, H.R. (1996). *Sensation and Perception: An integrated approach*. New York: John Wiley.
- Cohen, G., & Conway, M. A. (2007). *Memory in the real world*. Psychology press.
- सिंह, ए० के० (2017). *संज्ञानात्मक मनोविज्ञान / एक्सोटिक इण्डिया प्रकाशन।*
- श्रीवास्तव, बी०, आनन्द वी० एवम आनन्द बी० (2019). *संज्ञानात्मक मनोविज्ञान, मोतीलाल बनारसीदास प्रकाशन, पटना।*
- सिंह, आर० एन० एवम भारद्वाज, एस० एस० (2015). *उच्च प्रायोगिक मनोविज्ञान*, अग्रवाल पब्लिकेशन आगरा

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M.A. II Sem
Core: Experimental Design and Statistics

UNIT: 1-

Research Designs: Meaning and purpose, within & between group designs: Single group and Single Subject design, Randomized group design, Matched group design.

UNIT: 2-

Factorial Design and Latin Square Design.

UNIT: 3-

Statistical methods in Experimental designs: Hypothesis testing: Chi-square test, t test, one way and two way analysis of variance.

UNIT: 4-

Advanced Correlation Method: Bi-serial correlation, point-biserial correlation, phi-coefficient and tetrachoric correlation.

References:

- Breakwell, G.H., Smith, J.A. & Wright, D.B. (2012). *Research Methods in Psychology*. Sage Pub.
- Elmes, D. et al., (2012). *Research Methods in Psychology*. Senage Learning.
- Bridget, S., Cathy, L. (Eds.). *Research Methods in Social Sciences*. Vistar Publication, New Delhi.
- Karlinger, F. N. (1973). *Foundation of Behavior Science Research*. Surjeet Publication Delhi.
- McGuigan, F. J. (1960). *Experimental psychology: A methodological approach*.
- Broota, K. D. (1989). *Experimental design in behavioural research*. New Age International.
- Tripathi, L. B. (2012). *Psychological Research Method*. Agra, HP Bhargava Book House.
- श्रीवास्तव, डी. एन. (2020). *मनोवैज्ञानिक अनुसंधान एवं मापन*, विनोद पुस्तक भवन।
- सुलेमान, एम. (2005). *मनोविज्ञान शिक्षा एवं अन्य सामाजिक विज्ञानों में सांख्यिकी*। मोतीलाल बनारसी दास पब्लिकेशन।

• कपिल, एच. के. (2011). *सांख्यिकी के मूल तत्व (आठवाँ संस्करण)*। अग्रवाल प्रकाशन।

• श्री. एन. के. (2018). *सांख्यिकी के मूल तत्व (आठवाँ संस्करण)*। अग्रवाल प्रकाशन।

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M.A. II Sem

Core: Modern Theories of Personality

Unit I

The Dispositional Approach: Allport's Trait Approach, Cattell's Trait Approach, Eysenk's Type Approach, Big-5 factor model of personality.

Unit II

Humanistic Approaches: Murray's Need Theory, Need for achievement- Maclelland-Atkinson Approach, Maslow's Hierarchical Theory of Human Motivation.

Unit III

Phenomenological Theory and Cognitive Theory: Kelly's Personal Construct Theory. Roger's Self Theory, Mischel's Cognitive-Behavioural Theory.

Unit IV

Radical Behaviourism of Skinner: Social Learning Theory, Miller and Dollard Theory, Rotter's Theory, and Bandura's Theory.

References:

- Hall, C. S., Lindzey, G., & Campbell, J. B. (1957). *Theories of personality* (No. 04; BF698, H3.). New York: Wiley.
- Barbara E. (2008). *Personality theory*. (8th Edition)
- Pervin, L. A. (1970). *Personality: Theory, assessment, and research*.
- Ciccarelli, S.K. & White, J.N. (2021). *Psychology* (5th Eds). Pearson India Educational Services Pvt-Ltd.
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- श्रीवास्तव, डी0 एन0 (2004). *व्यक्तित्व मनोविज्ञान*, भार्गव पब्लिकेशन, आगरा।

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M.A. IInd Sem

Third Elective: (A) Environmental Psychology

Unit: I

Introduction: Nature, Scope, History and Focus of Environmental Psychology. Indian Perspective on Human-Environment Relationship.

Unit: II

Research Methods: Experimental, Simulation, Co-relational and Descriptive; Theories: Arousal, Experimental Load, Adoption Level, Ecological.

Unit: III

Environmental Perception and Cognition: Environmental Perception; Spatial Cognition; Environmental Values and Attitudes; Attachment and Identity; Appraisal and Assessment, Personal Space, Privacy and Territoriality.

Unit: IV

Environmental Stress and Health: Environmental Stress, Crowding, Noise, Overpopulation; Effects of Physical Environment on Health.

Unit: V

Weather and Climate issues: Disasters (Natural & Technological); Environmental risk perception; solution to environmental problems; saving environment.

References:

- Bell, P. A., Green, T., Fisher, J. D., & Baum, A. (2001). *Environmental psychology*. New Jersey.
- Gifford, R. (2007). *Environmental psychology: Principles and practice*.
- Winter, D. D., & Koger, S. (2004). *The Psychology of environmental problems (2nd Eds)*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Koger, S. M. (2014). *The psychology of environmental problems: Psychology for sustainability*. Psychology Press.
- Jain, U. (1987). *The psychological consequences of crowding*. Sage Publications, Inc.
- Stokols, D & Altman, I., (Eds) (2000). *Handbook of environmental psychology*, New York: Wiley.
- तिवारी, पी० एस० एन० (2000). *पर्यावरणीय मनोविज्ञान*, मोतीलाल बनारसीदास प्रकाशन।
- नागर, जी० (2014). *पर्यावरणीय मनोविज्ञान*, अग्रवाल प्रकाशन, आगरा।

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M.A. II Sem

Third Elective: (B) Health Psychology

Unit: I

Health and Well-being: Concept and Indicators; A brief history of health psychology; Goals of Health Psychology; Approaches to Health: Bio-medical, Psychological and Cultural.

Unit: II

Health Behaviour: Behavioral Factors in Health; Approaches to health behaviour change: Cognitive & Behavioural.

Unit: III

Health Problem and their cognitive representation: General and chronic Health Problems, Causal Factors and Explanations; Health Belief Systems; Changing Health Thought Belief and Attitudes, habits modification, exercise & diet.

Unit: IV

Stress and Coping: Conceptual models; Stress Born Health Problems; Coping Strategies, Pain Management.

Unit: V

Management of Health Problems: Preventive, Promotive and curative aspects of health; Choice of medicinal systems; Patient-Doctor Relationship; Treatment Adherence, Alternative Medicines.

References:

- Baum, A., Revenson, T. A., & Singer, J.E.. (2001). *Handbook of health psychology*. Psychology press.
- Estacio, E. V., Murray, M., & Marks, D. F. (2018). *Health psychology: Theory, research and practice*. *Health Psychology*, 1-832.
- Marks, F. D., Murray, M., Evans, B. K., & Willig, C. (2000). *Health psychology: Theory, research and practice*. New Delhi: Sage.
- Sarafino, E. P., & Smith, T. W. (2014). *Health psychology: Biopsychosocial interactions*. John Wiley & Sons.
- Taylor, S. E. (2015). *Health psychology*. McGraw-Hill Education.
- माथुर, एस० एस० एवम् माथुर ए० (2015). *स्वास्थ्य मनोविज्ञान*, अग्रवाल प्रकाशन, आगरा।
- दूबे, ए० एवम् शुक्ला, ए० (2022). *स्वास्थ्य मनोविज्ञान*। किताब महल प्रकाशन।

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M.A. II Sem

Fourth Elective: Practical or Industrial Training/ Project presentation

List of Practicals-

1. Selective attention
2. Span of attention
3. Chunking
4. Set in perception/ problem solving
5. Planning experimental study: Based on one way ANOVA design
6. Planning experimental study: Based on two way ANOVA design
7. Non-parametric statistics (Any two from syllabus)
8. Multiple Regression Analysis
9. Cattells 16 PF Test
10. NEO-PI-R (FFI) Test
11. Thematic Apperception Test (TAT)/Rorschach Test
12. Environmental Stress
13. Environmental Perception
14. Spatial Cognition
15. Health Beliefs
16. Gender and Health
17. Pathogenic health habits

Note: Any one Practical form each Paper .

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M.A. III Sem

Core: Advanced Social Psychology

UNIT: 1-

Social Psychology and Experimental Social Psychology: Meaning, Nature, and Studying Methods- Laboratory Experiments and Field Experiments.

UNIT: 2-

Study of Interpersonal Processes: Person Perception, Interpersonal Attraction, and Conflict Resolution: Intergroup Conflict, Experimental Study of Sherif.

UNIT: 3-

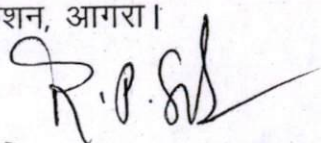
Social Norms and Norm Formation.

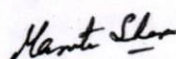
UNIT: 4-

Conformity: Meaning and Theories, Conformity Occurrence, Group Pressure, Individual Factors, Situational and Experimental factors. Some Experimental Techniques of Conformity: Social Facilitation (Sherif), Asch Technique and Crutch Field Techniques, Cognitive dissonance.

References:

- Aronson, E., Wilson, T.D. & Asch, S.E. (1963). *Social Psychology*. Upper Saddle River, N.J. Prentice Hall.
- Sanderson, C.A. & Safdar, S.F. (2012). *Social Psychology*. Mc Grahill Publication.
- Myers, D.G.C. (2012). *Social Psychology*. John Wiley.
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- सिंह, आर० एन०। (2015). *सामाजिक मनोविज्ञान*। अग्रवाल पब्लिकेशन, आगरा।
- त्रिपाठी, एल० बी०। (2016). *आधुनिक सामाजिक मनोविज्ञान*। मोलीलाल बनासीदास प्रकाशन।
- सिंह, आर० एन० एवं भारद्वाज, एस०। (2022) *सामाजिक व्यवहार का मनोविज्ञान*। अग्रवाल पब्लिकेशन, आगरा।


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M.A. III Sem
Core: Psychological Assessment

UNIT: 1-

Psychological Assessment: Nature and Purpose, Assessment, Evaluation and Testing, Principles of Assessment. Issues in Testing and Assessment.

UNIT: 2-

Psychological Testing: Nature, Present use, Construction of Psychological Test, Selection of Items, Item Analysis, Item Difficulty, Discrimination Power. Test Adaptation and Methods.

UNIT: 3-

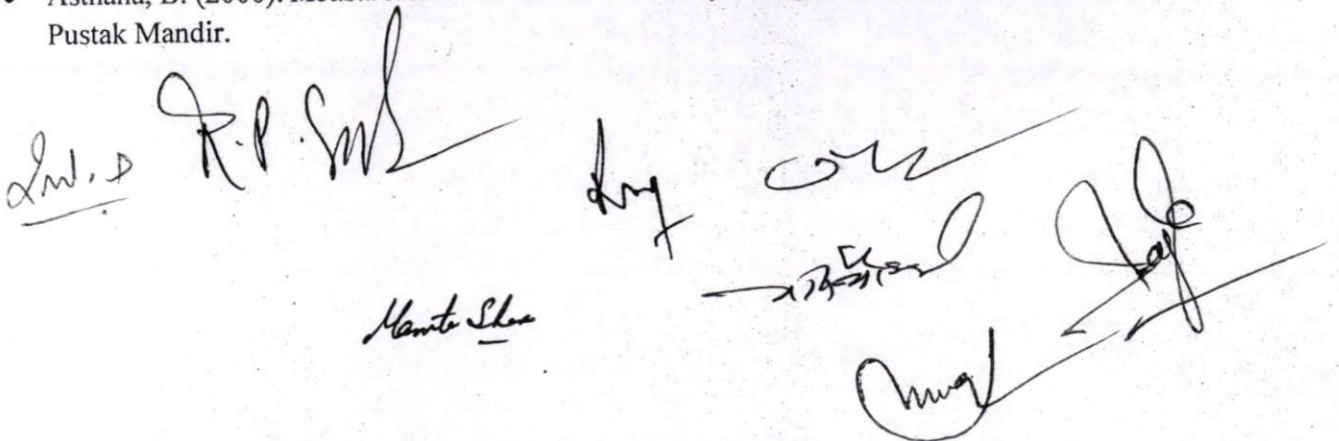
Psychometric Evaluation and Standardization of Test, Reliability and Validity, Development of Norms.

UNIT: 4-

Application of Psychological Test, Testing and Assessment in Various Settings: Educational, Counselling and Guidance, Clinical, Organizational and Developmental.

References:

- Insk Anastasi, A. (2012). *Psychological testing* (6th Edition).
- Ciminaro, A. R. (1984). *Handbook of behavioural assessment*. New York.
- Bhargava, M. (2006). *Modern psychological testing and measurement*. Agra: HP Bhargava book house.
- Kaplan, R. M., & Saccuzzo, D. D. (2007). *Psychological testing: Principles, applications, and issues*. Cengage Learning.
- Gronlund, N. E., Linn, R. L., & Miller, M. D. (2009). *Measurement & evaluation in teaching* (Tenth edit).
- Asthana, B. (2000). *Measurement and evaluation in Psychology and Education*. Agra: Vinod Pustak Mandir.



M.A. III Sem
Core: Mental Disorders

Unit: I

Mental Disorders: Causes of Mental Disorders; Classification of mental disorders: ICD- 11 & DSM-5; Approaches to the study of mental disorders: Biological, Psychodynamic, Behavioural, Cognitive and Socio-Cultural.

Unit: II

Psychoneurosis: Generalized Anxiety Disorder, Specific Phobias, Panic, Obsessive-Compulsive Disorder, Trauma and Stress related Disorder, Dissociative Disorder.

Unit: III

Psychosis: Schizophrenia, Spectrum disorders, Paranoid Disorder, Mood Disorder & Suicide.

Unit: IV

Cognitive Disorder: Delirium, Dementia, Alzheimer, Neuro-developmental disorders: Attention-deficit/hyperactivity disorder, Autism Spectrum disorders, Specific Learning Disorder: Dyslexia.

Unit: V

Substance Related and Addictive Disorders: Alcohol use, Intoxication and Withdrawal, Tobacco use and withdrawal.

References:

- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders: DSM-5* American Psychiatric Pub.
- Barlow, D.H. & Durand, V. M (2016). *Abnormal psychology: An integrative approach* (7th Edition) Cengage Learning.
- Buss, A.H. (1999). *Psychopathology*. New York: John Wiley.
- Butcher, J.N., Mineka, S., & Hookey, J.M. (2017). *Abnormal Psychology*. Pearson Education India.
- Davison, G.C. & Neals, J.M. (1996). *Abnormal Psychology*. New Yourk: John Wiley.
- Sarason, I.G. Sarason, B.R. (2006). *Abnormal Psychology* (11th Edition) Delhi: Prentice Hall India.
- सिंह, आर० एन एवम अन्य (2008). *आधुनिक असामान्य मनोविज्ञान*, अग्रवाल प्रकाशन, आगरा।
- सिंह, आर० एन एवम अन्य (2013). *मनोविकृति के आधार*, अग्रवाल प्रकाशन, आगरा।

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Dr. Singh

Dr. Singh

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M.A. III Sem

Fifth Elective: (A) Clinical Psychology

Unit: I

Clinical Psychology: Introduction, Historical Background, Current Status of Clinical Psychology, Professional Problem, Clinical Psychology in India.

Unit: II

Goals of Clinical Psychology; Methodology: Observation, Numerical scaling and the logical analysis of data; special problem in clinical psychology; clinical techniques: Sources of information, Diagnosis, Prognosis and Therapy.

Unit: III

Behavioural Assessment: Nature, Behavioural Observation, Cognitive-Behavioural Assessment, Cognitive Self-Report Inventories, Recording cognition, Psychological Assessment.

Unit: IV

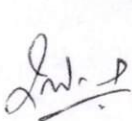
Diagnostic Tools: Clinical Interviews, Case Study, Personality Tests: MMPI, NEO-PI-R, Rorschach Ink Blot Test, Thematic Apperception Test (TAT), Luria-Nebraska Neuropsychological Test, Bender-Gestalt Test.

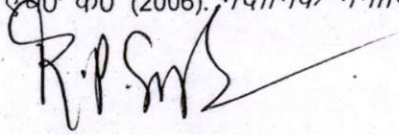
Unit: V

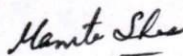
The Clinician in Action: Broad Area of activity; sites of activity, techniques of evaluation, case studies.

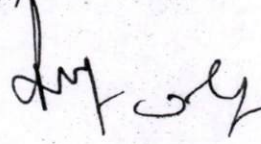
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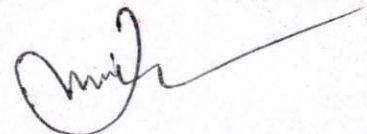
- Korchin, S. J. (1976). *Modern clinical psychology: Principles of intervention in the clinic and community*.
- Goldenbern, H. (1983). *Contemporary Clinical Psychology*. New York.
- Nietzel, M.T., Bernstein, D.A., & Misich, R. (1998). *Introduction of Clinical Psychology*. New Jersey: Prentice Hall.
- Shaffer, G.W. & Lazarus, R.S. (2007). *Foundational concept in clinical psychology*, Surjeet Publications: Delhi.
- Weiner, I.B. (1974). *Clinical Methods in Psychology*.
- Wolman, B.B. (1978). *Clinical Diagnosis of Mental Disorders: A handbook*. N.Y. Plenum.
- सिंह, ए० के० (2012). *उच्चतर नैदानिक मनोविज्ञान*। मोतीलाल बनारसीदास प्रकाशन।
- सिंह, ए० के० (2008). *आधुनिक नैदानिक मनोविज्ञान*।
- सुलेमान, एम० एवं कुमार, डी० (2008). *आधुनिक नैदानिक मनोविज्ञान*।
- कपिल, एच० के० (2006). *नैदानिक मनोविज्ञान*।











M.A. III Sem

Fifth Elective: (B) Organizational Psychology

Unit: I

Introduction: Historical Development in Organizational Behaviour; The organizational System; Structural Characteristics of organizations, Organizational Designs; Challenges and opportunities for organizational behaviour.

Unit: II

Motivation and Work: Meaning and Process: Theories of employee motivation: Alderfer and Mc Clelland; Goal Setting; Organizational behaviour modification theory.

Unit: III

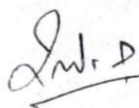
Organizational Leadership: Meaning and Theories- Trait, Behavioural & Fiedler; Leadership Style and Skills; Current issues in leadership; Organizational implications.

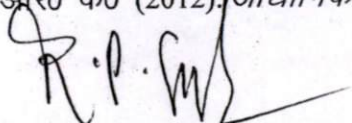
Unit: IV

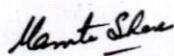
Power and Politics in Organizations: Bases of power and power tactics; Conflict and negotiation: Intra-individual and Interpersonal and intergroup conflicts; conflict process negotiation strategies and process.

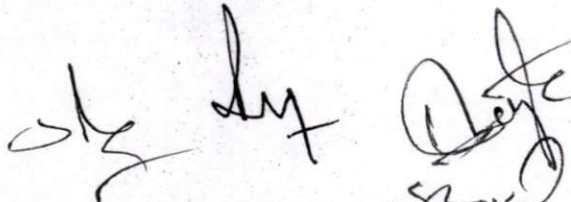
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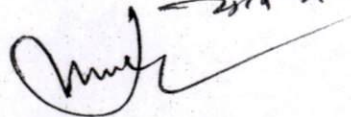
- George Jennifer, M., & Jones, G. R. (2012). *Understanding and Managing Organizational Behavior*.
- Hellriegel, D., & Slown, J.W. (2004). *Organizational behaviour*. South Western, Thompson.
- Katz, D. (1978). *Social psychology of organizations*.
- Luthans, F. (2005). *Organizational behaviour*. New York: Mc Graw Hill.
- Riggio, R. E. (2017). *Introduction to industrial/organizational psychology*. Routledge.
- Robbins, S. P., Judge, T. A., & Sanghi, S. (2009). *Organizational behaviour*, New Delhi: Doring Kindersley pvt.
- अस्थाना, बी. (2018). संगठनो में व्यवहार. अग्रवाल पब्लिकेशन।
- सिंह, ए० के० (2005). औद्योगिक एवम संगठनात्मक मनोविज्ञान, भारती पब्लिकेशन।
- ओझा, अर० के० (2012). औद्योगिक मनोविज्ञान, विनोद पुस्तक मन्दिर, आगरा।











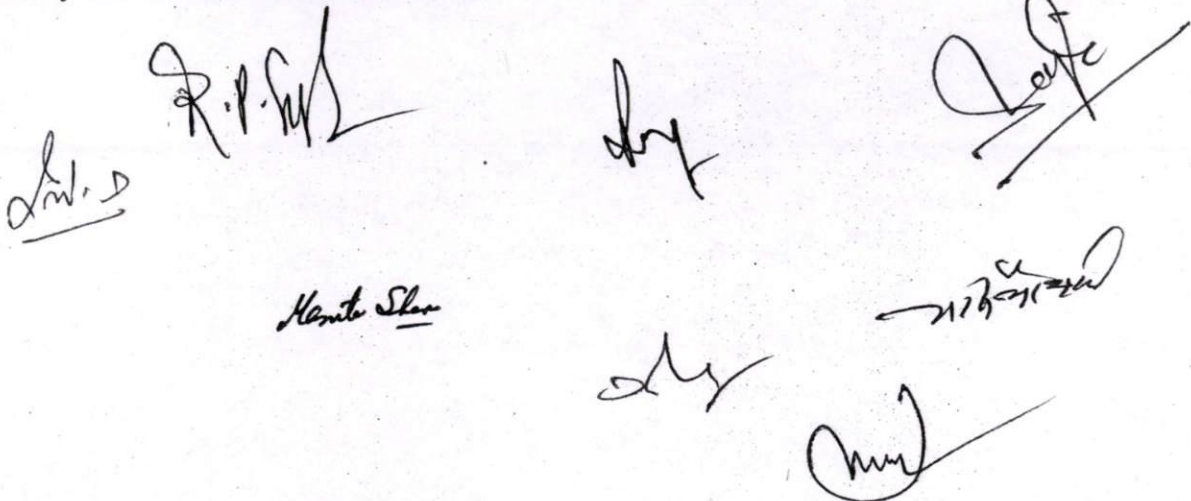
M.A. III Sem

Sixth Elective: Practical/ Study Tour or Project Presentation/ Test construction

List of Practicals-

1. Study of Social Problems
2. Interpersonal attraction
3. Level of Aspiration
4. Replication of any social experiment
5. Test/scale construction using factor analytic approach
6. Test/scale construction using Item analytic approach
7. Test/scale construction using Empirical approach
8. Test Adaptation
9. Psychometric evaluation of a test/scale
10. Psychological assessment in any specific setting (clinical, organization, educational etc.)
11. Measurement of Neuroticism
12. Measurement of depression
13. Mental health
14. Bender-Gestalt Test
15. Luria-Nebraska Test
16. Case study
17. Conflict resolution
18. Job involvement
19. Leadership
20. Functional Social support

Note: Any one Practical form each Paper

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M.A. IV Sem

Core: Applied Social Psychology

Unit: I

Introduction to applied social psychology: Definition, relation with basic social psychology, historical development and major concerns.

Unit: II

Social Psychology and health: Health belief model, health compromising behaviours; health promotion, cognition response and dual process models of persuasive change; Stress and health.

Unit: III

Social Psychology and Environment: Human interaction with environment; environmental hazards and challenges; environmental attitude risk perceptions, encouraging pro-environmental behaviour.

Unit: IV

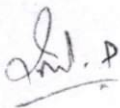
Aggression & Violence: Conceptual issues and theoretical explanations; Deterministic, interpersonal and intergroup forms of aggression; dynamics of violence, strategies for reducing aggression and violence.

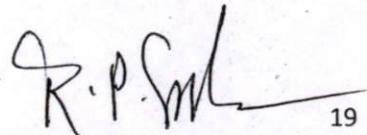
Unit: IV

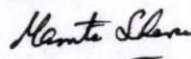
Social Psychology and consumer behaviour: Economics, Social-psychological approaches; Meaning of money, Social beliefs and value systems, consumer socialization.

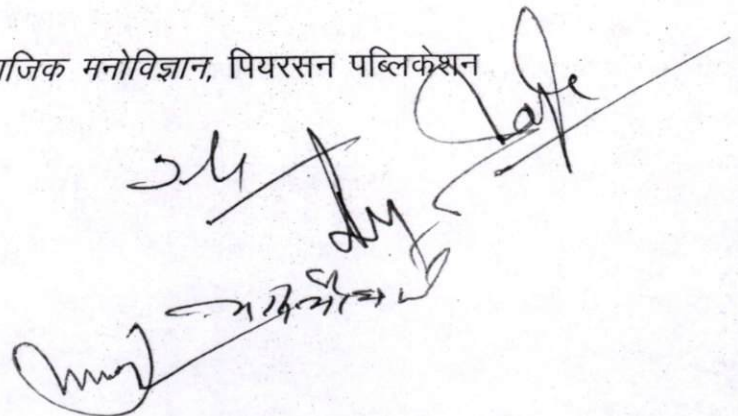
References:

- Baron, R. A., Branscombe, N. R., & Byrne, D. E. (2008). *Social psychology*. Pearson Education India.
- Myer, D.G. (2012). *Social Psychology*, New York: Mc Graw Hill.
- Fiedler, K., & Semin, G. (1996). *Applied social psychology*. 1-504.
- Taylor, S. E., Peplau, L. A., & Sears, D. O. (2006). *Social psychology* (12th Eds). New Jersey.
- Feldman, R.S. (1985). *Social Psychology, Theory, Research and applications*. Mc Graw Hill: New Delhi.
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- वैरन, आर० ए० एवं वायर्न, डी०। (2004). *सामाजिक मनोविज्ञान*, पियरसन पब्लिकेशन इण्डिया।



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M.A. IV Sem
Core: Psychological Measurement.

Unit I.

Measurement of General Mental Ability: Intelligence Testing, Nature, Theories (Spearman, Thurston, Guilford, Cattell). Speed and Power tests, Individual and Group Tests. Verbal and Performance Tests and Cross-cultural Tests.

Unit II.

Personality Testing: Concept of Personality, Psychometric Tests (Inventory, Questionnaire) Projective Techniques (Rorschach Ink Blot Test & Thematic Apperception Test) Problems of reliability and validity of projective test.

Unit III.

Tests of Special abilities: Aptitude Testing, Occupational Testing, Clinical Testing, Educational Testing and Creativity.

Unit IV.

Different Tests and its Application: Stanford-Binet Test. Wechsler Scale, 16 PF, B. Mehendi Creativity Test and Rorschach Test.

References:

- Freeman, F. S. (2017). *Theory and Practice of Psychological Testing*.
- Anastasi, A. (1988). *Psychological Testing* (6th Edition).
- Anastasi, A., & Urbina, S. (1997). *Psychological testing*. Prentice Hall/Pearson Education.
- Bhargava, M. (2006). *Modern psychological testing and measurement*. Agra: HP Bhargava book house.
- Asthana, B. (2000). *Measurement and Evaluation in Psychology and Education*. Agra: Vinod Pustak Mandir

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M.A. IV Sem

Seventh Elective: (A) Psychotherapeutic Techniques

Unit: I

Introduction to psychotherapy: Specific therapeutiraciabes: The client and the therapist, client-therapist relationship; stages of psychotherapy: Initial contact, assessment, goals of treatment, implementing treatment, termination, evaluation and follow-up; Issues in Psychotherapy.

Unit: II

Psychoanalytic Therapy (Freudian): Goals and Assumptions; Techniques: Free Association, Analysis of Dream, Analysis of resistance, Transference, Confrontation and Clarification, Interpretation and working through; Role of maintaining analytic framework.

Unit: III

Behavioural and Cognitive Perspective: Origins; Techniques- Systematic desensitization, exposure therapy, assertiveness, modeling, behavioural rehearsal, contingency management, aversion therapy, Cognitive-Behaviour Therapy- Eliss and Bech's Approach.

Unit: IV

Phenomenological and Humanistic existential Psychotherapy: Client- Centered Therapy, Gestalt therapy, Existential therapy.

References:

- Corey, G. (2009). *Theory and practice of counseling and psychotherapy*. Belmont, CA: Brooks.
- Culani, S. (1998) *Foundation of Clinical Psychology*. New York: Allyn & Bacon.
- Nietzel, M. T., Bernstein, D. A., & Milich, R. (1994). *Introduction to clinical psychology*. Prentice-Hall, Inc.
- Plante, T. G. (2010). *Contemporary clinical psychology*. John Wiley & Sons.

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M.A. IV Sem

Seventh Elective: (B) Human Resource Management

Unit: I

Foundation of Human Resource Management (HRM): Foundation, Nature, Function, HRM in changing environment- strategic and international human resource management; ethical issues.

Unit: II

Acquisition of Human Resource: Planning, assessment of demand, job analysis, selection process.

Unit: III

Career Management: Socialization of Employees, Determining training needs, methods or techniques of training and management development, evaluation of training programs; Stage of career development, effective career development.

Unit: IV

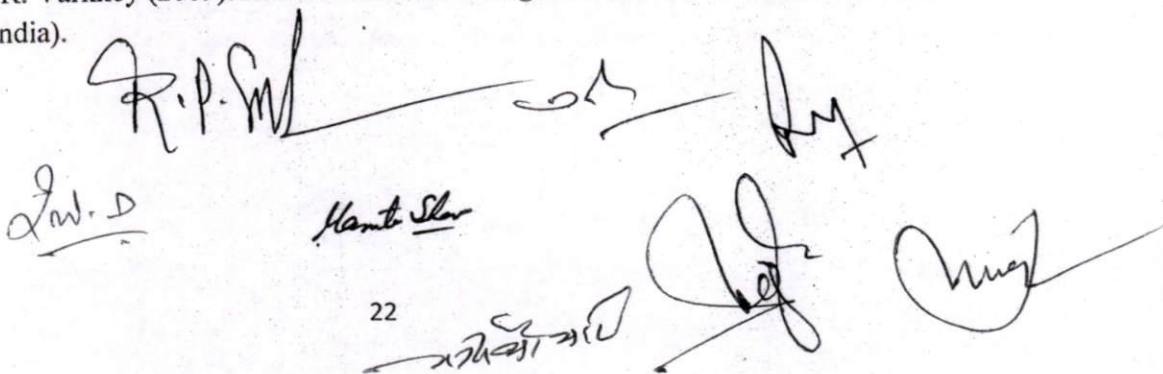
Performance Management: Performance appraisal: System, Process and Methods of Appraisal, Distortion in appraisal, Creating effective appraisal system.

Unit: V

Reward Management: Motivational Perspective, Job characteristics model, Rewarding Productive employees; Compensation administration; benefits and Services; Empowerment.

References:

- Beardwell, I., & Holden, L. (1996). *Human resource management: A contemporary perspective*, New Delhi: Macrillan India Ltd.
- Bhatia, S. K., & Singh, N. (2000). *Principle and techniques of personnel management/human resources management*.
- Decenzo, D. A., & Robbins, S. P. (1999). *Human Resource Management: concepts and applications*. New York: John Wiley & Sons.
- Dwivedi, R. S. (1997). *Managing Human Resources-Personnel Management in Indian Enterprises*. New Delhi: Galgotia.
- Hersey, P., Blanchard, K. H., & Johnson, D. E. (2016). *Management of organizational behavior*.
- Dessler, G.R. Varkkey (2009). *Human resource management*, Delhi: Dorling Kindersley Pvt. Ltd. (India).



M.A. IV Sem

Research Project/Dissertation: Dissertation

Note: Topic of Dissertation will be based on the papers studied by a student in either of the semesters.

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Dr. Rammanohar Lohia Avadh University, Ayodhya (Uttar Pradesh)

MA (English) Syllabus- 2022-23 onwards

(For College)

Structure of Syllabus			
Coordinator/Member	Designation	Department	College/University
Prof. V. P. Singh	Professor	English	KNIPSS Sultanpur
Prof. V. C.H. K. Srinivas Rao (Member)	Professor	English	LBS Gonda
Prof. M.S. Pandey (Member)	Professor	English	BHU Varanasi
Prof. Nandita Singh (Member)	Professor	English	DDU Gorakhpur
Prof. A.P. Barat (Member)	Professor	English	BHU Varanasi

Prof. Nisha Singh " " Rans Prataap College Sultanpur
 " Meenu Dubey " " R.M.P.G. College Manukha Ayodhya

Semester I

Core Paper:

Chaucer to Marlowe

Unit I

(Prose)

Francis Bacon: Of Ambition, Of Revenge, Of Great Place.

(Poetry)

Unit II

Geoffrey Chaucer: The General Prologue to The Canterbury Tales

Edmund Spenser: The Faerie Queene (Book I Canto I)

(Elizabethan Comedy)

Unit III

John Lyly: Endymion

Ben Jonson: The Alchemist

(Elizabethan Tragedy)

Unit IV

Thomas Kyd: The Spanish Tragedy

Christopher Marlowe: Doctor Faustus

Core Paper:

Donne to Henry Fielding

(Prose)

Unit I

Joseph Addison: True and False Humour

Richard Steele: On Judicious Flattery

(Poetry)

Unit II

John Donne: A Valediction Forbidding Mourning, The Canonization

John Milton: Paradise Lost Book I

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- Alexander Pope: The Rape of the Lock
(Drama)
- Unit III John Webster: The Duchess of Malfi
William Congreve: The Way of the World
(Fiction)
- Unit IV Daniel Defoe: Moll Flanders
Henry Fielding: Joseph Andrews
- Core Paper: Wordsworth to Hardy
(Prose)
- Unit I Charles Lamb: Modern Gallantry
Thomas Carlyle: Heroes and Hero Worship: The Hero as Poet
- Unit II John Ruskin: Unto This Last: The Roots of Honour
Matthew Arnold: Culture and Anarchy: Sweetness and Light
(Poetry)
- Unit III William Wordsworth: Tintern Abbey
Coleridge: Dejection: An Ode
Keats: Ode on a Grecian Urn
Shelley: Ode to the West Wind
Tennyson: Come into the Garden, Maud
Browning: The Last Ride Together
Arnold: The Scholar Gypsy
(Fiction)
- Unit IV Jane Austen: Sense and Sensibility
Thomas Hardy: Tess of the D'Urbervilles
- First Elective Paper (any one): a- William Shakespeare
(Poetry)
- Unit I Look in the Glass and Tell the Face Viewest (Sonnet 3)
Shall I Compare Thee to a Summer's Day (Sonnet 13)
Heavy Do I Journey On The Way (Sonnet 50)
Where Art Thou Muse (Sonnet 100)
The Expense of Spirit In A Shame (129)

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- (Drama)
- Unit II Henry IV, Part I
 - Unit III Hamlet
 - The Tempest
 - (Criticism)
 - Unit IV Preface to Shakespeare by Samuel Johnson
 - b- T. S. Eliot
 - (Poetry)
 - Unit I Burnt Norton
 - Unit II Gerontion, The Hollow Men
 - (Drama)
 - Unit III The Family Reunion
 - The Cocktail Party
 - (Criticism)
 - Unit IV The Function of Criticism
 - Hamlet and His Problems
 - What is a Classic?
- Second Elective (any one): a- Project Presentation
b- Study Tours/Field Visit

Semester II

- Core Subject Paper: 20th Century British Literature
- (Prose)
- Unit I Jean Paul Sartre: Existentialism and Human Emotions: Existentialism
 - (Poetry)
 - Unit II W. B. Yeats: Byzantium
 - T. S. Eliot: The Waste Land
 - Philip Larkin: Here
 - Ted Hughes: Hawk Roosting
 - Seamus Heaney: Casualty
 - (Fiction)
 - Unit III Virginia Woolf: To the Lighthouse
 - D. H. Lawrence: Sons and Lovers

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(Drama)

Unit IV Harold Pinter: The Homecoming
Samuel Beckett: Waiting for Godot

Core Subject Paper: English Literary Criticism

Unit I Aristotle: Poetics
Horace: Ars Poetica

Unit II John Dryden: An Essay of Dramatic Poesy
Wordsworth: Preface to Lyrical Ballads (1800)
Matthew Arnold: The Study of Poetry
T S Eliot: Tradition and Individual Talent

Unit III **Feminist Criticism and Postcolonial Theory**
Elaine Showalter: Feminist criticism in the wilderness
Edward Said: Crisis (in Orientalism)

Unit IV **Deconstruction and Psychoanalytic criticism**
Jacques Derrida: Structure, Sign and Play in the Discourse of the Human Sciences
Jacques Lacan: The insistence of the letter in the unconscious

Core Subject Paper: Women and Literature

Unit I Virginia Woolf: A Room of One's Own
Simone de Beauvoir: Introduction to The Second Sex

Unit II Anita Desai: Fire on the Mountain
Bharati Mukherjee: Jasmine

Unit III Sylvia Plath: Lady Lazarus
Mamta Kalia: Tribute to Papa
Suniti Namjoshi: The Unicorn
Maya Angelou: Phenomenal Woman

Unit IV Mahasweta Devi: Mother of 1084

Third Generic Elective (any one): a- Applied Linguistics

Unit I Origin, growth and development of English; Growth of Vocabulary, Change of Meaning.

Unit II Socio-linguistics; Dialects, Idiolects and Registers; Evolution of Standard English; English as a Global Language.

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Unit III	Morphology
Unit IV	Grammars (Traditional, Structural and Transformational Generative)
	b- Translation Theory and Practice
Unit I	Importance of translation in a multi-linguistic and multi-cultural society
Unit II	Theories of Translation: Linguistic and Non-linguistic
Unit III	Problems of Translation: Phonetic Problem, Syntactic problem, Structural Problem, Cultural Problem, Semantic Problem, Untranslatability.
Unit IV	Translation and Comparative Literature Translation and Postcolonial Studies Translation and Women's Writing
Fourth Elective (any one):	a- Project Presentation, b- Study Tours/Field Visit

Semester III

Core Subject Paper: American Literature
(Poetry)

Unit I	R. W. Emerson: Brahma Whitman: When Lilacs Last in the Dooryard Bloom'd Emily Dickinson: Hope is a thing with feathers Robert Frost: Birches
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(Drama)

Unit II	Edward Albee: Who's Afraid of Virginia Woolf
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(Short Story and Fiction)

Unit III	E. A. Poe: The Purloined Letter, The Fall of the House of Usher Hemingway: Soldier's Home
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Unit IV	Toni Morrison: Beloved
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Core Subject Paper: Indian Literature in English
(Prose)

Unit I	Mahatma Gandhi: Hind Swaraj (Poetry)
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Unit II	Sarojini Naidu: Coromandel Fishers
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	Rabindranath Tagore: In one salutation to thee
	Nissim Ezekiel: A Morning Walk
	Jayanta Mahapatra: Indian Summer
	K. Ramanujan: Small-scale Reflections on a GreatHouse
	Kamala Das: My Grandmother's House
	(Drama)
Unit III	Mahesh Dattani: Final Solutions
	(Fiction)
Unit IV	Raja Rao: Kanthapura
	Arundhati Roy: The God of Small Things
Core Subject Paper:	New Literatures in English
Unit I	Chinua Achebe: Things Fall Apart
	Derek Walcott: A Far Cry from Africa
Unit II	V.S. Naipaul: A House for Mr. Biswas
Unit III	A.D. Hope: Australia, Death of the Bird
	Judith Wright: The Company of Lovers, Woman to Man
Unit IV	Margaret Atwood: Surfacing
	Fifth Elective (any one): a- Phonetics and English for Specific Purposes
Unit I	Organs of Speech, Speech Mechanism, Speech Sounds, Phonetic Symbols.
Unit II	Phonemes, Allophones, Sound Sequences: Syllable, Word Stress, Strong and Weak Forms Stress and Intonation.
Unit III	English as a Second Language, English for Academic Purposes, English on the Workplace,
Unit IV	Business English, Technical English, Scientific English, Legal English, English for Tourism, English for Thesis and Dissertation writing.
	b- Sanskrit Poetics
Unit I	Sanskrit Poetics: Origin and Growth, Main aspects of Indian Aesthetics
Unit II	Major Literary Theories: Rasa Theory Dhvani Theory
Unit III	Vakrokti Theory

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Unit IV

Relevance and Application of Sanskrit Literary Critical Tools

Sixth Elective (any one): a- Project Presentation,

b- Study Tours/Field Visit

Semester IV

Core Subject Paper: Indian Literature in Translation

Unit I: (Drama)

Kalidas: Shakuntala

Vijay Tendulkar: The Vultures

(Fiction)

Unit II : Ismat Chughtai: The Crooked Line

U R Ananthamurthy: Sanskara

(Poetry)

Unit III: Ajneya: Hiroshima

Sitakant Mahapatra: The Song of Jara

Subramania Bharati: Freedom

Daya Pawar: Oh Great Poet

Mahadevi Verma: No Matter the way be Unknown

(Autobiography)

Unit IV Amrita Pritam: Revenue Stamp

Core Subject Paper: Green Literature

(Prose)

Unit I Henry David Thoreau: Where I Lived and What I Lived For

Vandana Shiva: Women in Nature (Staying Alive- 3rd chapter)

(Poetry)

Unit II Andrew Marvell: The Garden, The Mower against Gardens

Wordsworth: Lines Written in Early Spring, The World is too Much With Us,

G M Hopkins: Binsey Poplars, Pied Beauty

Robert Frost: The Oven Bird

(Drama)

Unit III Shakespeare: As You Like It

(Fiction)

Unit IV George Orwell: Coming Up For Air

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Rohinton Mistry: A Fine Balance

Seventh Elective (any one): a- English Language Teaching and Stylistics

Unit I	Language Acquisition & Language Learning Theories of Language Acquisition Language Learning and Teaching Learner Factors Sociology of Language Teaching and Language Learning
Unit II	Approaches, Methods and Techniques Grammar-Translation Method and Reform Movement Direct Method Communicative Language Teaching Structural Approach and Audio - lingual method Bilingual Method, Eclectic Method Use of Teaching Aids: Blackboard, Pictures, Realia, Overhead Projector (OHP), Tape Recorder, Language Laboratory, Video, Television Developing Skills-Four Skills (LSRW), Study Skills and Reference Skills, Grammar, Pronunciation, Vocabulary
Unit III	English Language Teaching in India English in India-Past, Present and Future Problems of Teaching English in India Contrastive and Error Analysis Tests and Testing/ Evaluation
Unit IV	Language of Literature Style, Statistics-Nature and Scope Linguistics, Literary Criticism and Stylistics Foregrounding and Interpretation: Various types of Deviations, Parallelism, Repetitions etc. Figurative Language: A Detailed study of Figures of Speech Rhythm and Metre b- English Writing on India
Unit I	Rudyard Kipling: Kim
Unit II	E M Forster: A Passage to India
Unit III	Paul Scott: The Jewel in the Crown
Unit IV	Mark Tully: No Full Stops in India

Major Research Project/Dissertation/Viva-voce



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DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA


STRUCTURE OF SYLLABUS FOR THE PROGRAMS :- M.A., SUBJECT- EDUCATION

SN	Name of Expert/BoS Member	Designation	Department	College/ University
01	Prof. Shiv Sharan Shukla (Convener of BOS)	Professor	Education	S.L.B.S.Degree College Gonda
02	Prof. B.K. Gupta (Member of BOS)	Professor	Education	J.N.M. P.G. College Barabanki
03	Prof. Aditya Narayan Tripathi (Member of BOS)	Professor	Education	S.T.D.P.G. College, Kadirpur, Sultanpur

Course Code		Course Title	Credits	T/P	Evaluation	
A	B				CIE	ETE
SEMESTER I (YEAR I)						
	CORE	<i>Indian Philosophies of Education</i>	5	T	25	75
	CORE	Sociological Bases of Education	5	T	25	75
	CORE	Methodology of Educational Research	5	T	25	75
	FIRST ELECTIVE (Select any one)	History of Indian Education	5	T	25	75
		Measurement and Evaluation in Education	5	T	25	75
	SECOND ELECTIVE (Select any one)	Prepare and Presentation of Synopsis	5	P	50	50
		Prepare and Presentation of Tools	5	P	50	50
SEMESTER II (YEAR I)						
	CORE	Psychological Bases of Education	5	T	25	75
	CORE	Educational Administration and Management	5	T	25	75
	CORE	Comparative Education	5	T	25	75
	THIRD ELECTIVE (Select any one)	Population Education	5	T/P	50	50
		Environmental Education	5	T/P	50	50
	FOURTH ELECTIVE (Select any one)	Psychological Tests	5	P	50	50
		Psychological Experiment	5	P	50	50


Prof. Aditya Narayan Tripathi
(Member of BOS)


Prof. B.K. Gupta
(Member of BOS)


Prof. Shiv Sharan Shukla
(Convener of BOS)

SEMESTER III (YEAR II)						
	CORE	Special Education	5	T	25	75
	CORE	Educational Guidance and Counseling	5	T	25	75
	CORE	<i>Philosophical Basis of Education: Western Philosophies</i>	5	T	25	75
	FIFTH ELECTIVE	Educational Technology	5	T	25	75
	(Select any one)	Information and Communication Technology	5	T	25	75
	SIXTH ELECTIVE	Study Tour	5	P	50	50
	(Select any one)	Project Presentation/Test Construction	5	P	50	50
SEMESTER IV (YEAR II)						
	CORE	Teacher Education	5	T	25	75
	CORE	Economics of Education	5	T	25	75
	SEVENTH ELECTIVE	Curriculum Development	5	T/P	25/50	75/50
	(Select any one)	Distance Education	5	T/P	25/50	75/50
	RESEARCH PROJECT/ DISSERTATION	Major Research Project/ Dissertation	10	P	50	50

NOTE:

1. Do not mark any Code/Information in Column-A, it will be indorsed by the University.
2. T/P In Column-E stands for Theory/Practical.
3. CIE in Column-F stands for Continuous Internal Evaluation and depicts the maximum internal marks. Respective examination will be conducted by subject teacher.
4. ETE in Column-G stands for External Evaluation and depicts the maximum external marks. Respective Examination will be conducted by the University.
5. Column-B defines the nature of course/paper. The word CORE herein stands for Compulsory Subject Paper.
6. Column-D depicts the credits assigned for the corresponding course/paper.
7. First Elective: It will be a Subject Elective. Students may select one of the two subject papers under this category.
8. Second Elective: It will designate a Practical Paper or equivalently a Field Visit or Project Presentation. In case of Field Visit, student is required to submit a detailed report of the visit for the purpose of evaluation. The report should include the observational features and benefits of the visit. In case of Project Presentation, the student may be assigned to go for a survey/practical or theoretical project/assignment or seminar with presentation.
9. Third Elective: It will be a Generic Elective. The student may study or receive training of the any subject of his interest (depends on the availability in his institution of enrollment). The Generic elective paper will be evaluated in two parts, first part (50 marks) would be a continuous internal evaluation (03 tests 20+20+10 marks) whereas the examination and evaluation of the second part (50 marks) would be arranged by the college itself (01 exam).
10. Fourth Elective: It will accommodate a practical paper or Industrial Training or Project Presentation. In case of Industrial Training, student may be allowed for the summer training and is required to submit a detailed training report including training certificate for the evaluation.
11. Fifth Elective: It will be a Subject Elective. Students may select one of the two subject papers under this category.
12. Sixth Elective: It will be a Practical Paper or equivalently a Project Presentation based on Survey/ Seminar/ Assignment. In case of Project Presentation, student has to submit an exhaustive report on respective topic and to face an open presentation for the evaluation.
13. Seventh Elective: It will be a Major Research Project or equivalently a research-oriented Dissertation on the allotted topic. The student straight away will be awarded 05 credits if he publishes a research paper on the topic of Research Project or Dissertation.
14. Methodology for the practical examination and examiner appointment will be governed by the Clause-13 of the NEP Guideline of RMLAU dated 27-06-2022 except the marks distribution for continuous internal evaluation and external evaluation.

SEMESTER - I (Year-I)

CORE PAPER - I

INDIAN PHILOSOPHIES OF EDUCATION

Course Objectives-

The Philosophical Components of this core paper for a post graduate course in education aims at developing the following competencies amongst the scholars.

- 1) Understanding the nature and functions of Indian philosophy of education
- 2) Analysis, Interpretation and synthesis of various philosophical concepts, repositions and assumptions such as the metaphysical problem, epistemology and axiology and their impact on Indian education.
- 3) Critical appraisal of the contributions of prominent Indian educational thinkers to education.

Course content

Unit - I

Some basic concepts of Indian Philosophy and Education

- 1) Darshan
- 2) Dharma
- 3) Shiksha
- 4) Vidya
- 5) Pragya

Relationship between Darshan, Dharma and Vidya

Unit-II

The following Indian schools of thought will be studied with reference to their contribution to Indian Education

- 1) Vedic Darshan
- 2) Buddhism
- 3) Jainism
- 4) Islamic Traditions

Unit-III

Darshan (Six Schools of Thought) and their Educational Implications with special reference to

1. Sankhya
2. Vedanta
3. Nyaya
4. Yoga

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Unit-IV

Critical appraisal of the contribution towards education of Vivekanand, Aurbindo, Gandhi and Tagore.

Books Recommended :

1. Dinkar, Ramdhari Singh : Sanskrit Ke Char Adhyay, Udayacharya; Prakashan, Patna.
2. Hirriyana, M The Essential of Indian Philosophy.
3. Mad Wingo (1974) : Philosophy of Education. An Introduction.
4. Pandey, RS. (1995): SHIKSHA DARSHAN, Vinod Pustak Mandir, Agra
5. Jaffar, S.M. (1938) : Education in Muslim India, Lahore.
6. Oad, L.K. (1979), Shiksha ke Darshanik Avam Samaj Shastriya Adhar, Jaipur Rajasthan Grantha Academy.
7. Das. Gupta SN. : Outlines of Indian Philosophy, Vols. 6.
8. Garulla, Vachaspati: Bhartiya Darshan.
9. Radha Krishanan, S. (2000) : Indian Philosophy, Vol-I & II, Oxford University Press, New Delhi.
10. त्रिपाठी, एस्वीएण्ड पाण्डेय, एसाउडी, शिक्षा के दार्शनिक आधार, भारतीय पब्लिसर्स फैजाबाद।



SEMESTER –III (Year-I)

CORE PAPER - I/I

Philosophical Bases of Education : Western Philosophies

Course Objectives-

To enable the students to develop an understanding about the :

1. Contribution of Philosophy to the field of education.
2. Impact of Western Philosophies on Indian Education.
3. Contribution of a few of the Great Western Thinkers.
4. Nature and success of knowledge getting process.

Course Content

Unit - I

Meaning, Nature and Scope of Education and Philosophy;

Relationship between Education & Philosophy.

Unit-II

Western Philosophies : Major schools.

- (I)
 - i. Naturalism
 - ii. Idealism
 - iii. Pragmatism
 - iv. Realism
- (II) Modern concepts of Philosophy
 - i. Logical positivism
 - ii. Existentialism
 - iii. Marxism

Their educational implications with special reference to epistemology axiology and the process of education.

Unit-III

Great Western Education

- i. Plato
- ii. Rousseau
- iii. John dewey

Unit-IV

Democracy and Education

Education and Freedom.

Books Recommended

1. Bayles, E.E. : pragmatism In Education, Philosophy of Education Series Harper row Ne York, 1971
2. Boyed, William and King : The History of Western Education, 1972.
3. Brubacher, J.S. : Modern Philosophies of Education
4. नेलर, जार्ज एफ (1971), इंट्रोडक्शन ऑ फिलासफी ऑफ एजुकेशन, जान विली एण्ड सन्स।
5. पाण्डेय, के०पी० (1988). परस्पेक्टिज इन सोशल फाउन्डेशन ऑफ एजुकेशन, अमिताम प्रकाश, दिल्ली।
6. पाण्डेय, रामसकल (1983), शिक्षा दर्शन, विनोद पुस्तक मन्दिर, आगरा।
7. बेकर, जान एल मार्टन (1980), फिलासफीज ऑफ एजुकेशन, टाटा मेग्राहिल।
8. त्रिपाठीएल० एवं पाण्डेय, एस०डी० (2013), शिक्षा के दार्शनिक आधार, भारतीय पब्लिशर्स, फैजाबाद।





DR. RAM MANOHAR LOHIA AVADH UNIVERSITY, AYODHYA

Structure of (Revised) Syllabus for the Program: M.A., Subject: ECONOMICS

Structure of Syllabus Developed by			
Name of BoS Convenor/ BoS Member	Designation	Department	College/ University
Dr. Jitendra Bahadur Pal (Convenor)	Professor	Economics	Shri L.B.S. Degree College Gonda
Dr. Hajari Prasad Chaudhary (Member)	Associate Professor	Economics	T.N.P.G.College, Tanda, Ambedkar Nagar
Dr. Sanjeev Ratan Gupta (Member)	Assistant Professor	Economics	Sant Tulsidas P.G. College, Kadipur, Sultanpur
Dr. Chandrakesh Kumar (Member)	Assistant Professor	Economics	B.B.D. P.G. College, Paruiya Ashram, Ambedkarnagar
Dr. Sandeep Kumar Dixit (Subject Expert)	Professor	Economics	D.D.U.Gorakhpur University, Gorakhpur

Course Code		Course Title	Credits	T/P	Evaluation	
A	B				CIE	ETE
A	B	C	D	E	F	G
SEMESTER I (YEAR I)						
	CORE	History of Economic Thoughts	5	T	25	75
	CORE	Micro Economic Analysis	5	T	25	75
	CORE	Problems of Indian Economy: Basic Issues	5	T	25	75
	FIRST ELECTIVE (Select any one)	Statistical Methods	5	T	25	75
		Infrastructure Development of India	5	T	25	75
	SECOND ELECTIVE (Select any one)	Project Presentation on the Problem of Indian Economy	5	P	50	50
		Project Presentation on Infrastructure development of India	5	P	50	50
SEMESTER II (YEAR I)						
	CORE	Advanced Economic Theory	5	T	25	75
	CORE	Indian Economy: Industrial and External Sector	5	T	25	75
	CORE	Quantitative Methods	5	T	25	75
	THIRD ELECTIVE (Select any one)	Industrial Economics	5	T	25	75
		Environmental Economics	5	T	25	75
	FOURTH ELECTIVE (Select any one)	Project Presentation on Indian M.S.M.E.	5	P	50	50
		Field Visit	5	P	50	50
SEMESTER III (YEAR II)						
	CORE	Monetary Economics	5	T	25	75
	CORE	International Economics	5	T	25	75

	CORE	Economics of Growth & Development	5	T	25	75
	FIFTH ELECTIVE (Select any one)	Agriculture Economics	5	T	25	75
		Labour Economics	5	T	25	75
	SIXTH ELECTIVE (Select any one)	Project Presentation on Indian Foreign Trade and It's challenges	5	P	50	50
		Project Presentation on Economic Policies of Rural Development	5	P	50	50
SEMESTER IV (YEAR II)						
	CORE	Macro Economic Analysis	5	T	25	75
	CORE	Public Economics	5	T	25	75
	SEVENTH ELECTIVE (Select any one)	Modern International Economics	5	T	25	75
		Demography	5	T	25	75
	RESEARCH PROJECT/ DISSERTATION	Dissertation	10	P	50	50

NOTE:

- Do not mark any Code/information in Column-A, it will be indorsed by the University.
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- ETE in Column-G stands for 'External Evaluation' and depicts the maximum external marks. Respective Examination will be conducted by the University.
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- First Elective:** It will be a Subject Elective. Students may select one of the two subject papers under this category.
- Second Elective:** It will designate a Practical Paper or equivalently a Field Visit or Project Presentation. In case of Field Visit, student is required to submit a detailed report of the visit for the purpose of evaluation. The report should include the observational features and benefits of the visit. In case of Project Presentation, the student may be assigned to go for a survey/practical or theoretical project/assignment or seminar with presentation.
- Third Elective:** It will be a Generic Elective. The student may study or receive training of the any subject of his interest (depends on the availability in his institution of enrollment). The Generic elective paper will be evaluated in two parts, first part (50 marks) would be a continuous internal evaluation (03 tests 20+20+10 marks) whereas the examination and evaluation of the second part (50 marks) would be arranged by the college itself (01 exam).
- Fourth Elective:** It will accommodate a practical paper or Industrial Training or Project Presentation. In case of Industrial Training, student may be allowed for the summer training and is required to submit a detailed training report including training certificate for the evaluation.
- Fifth Elective:** It will be a Subject Elective. Students may select one of the two subject papers under this category.
- Sixth Elective:** It will be a Practical Paper or equivalently a Project Presentation based on Survey/ Seminar/ Assignment. In case of Project Presentation, student has to submit an exhaustive report on respective topic and to face an open presentation for the evaluation.
- Seventh Elective:** It will be either Subject Elective or Practical Elective.
- There will be a Major Research Project or equivalently a research-oriented Dissertation in Semester-IV. The student straight away will be awarded 05 credits if he publishes a research paper on the topic of Research Project or Dissertation.
- Methodology for the practical examination and examiner appointment will be governed by the Clause-13 of the NEP Guideline of RMLAU dated 27-06-2022 except the marks distribution for continuous internal evaluation and external evaluation.
- The Hon'ble conveners may take flexibility to rearrange the credits of the papers as 4/5/6 as per need, but within the limit of 25 credits assigned for each semester.

J. P. P. P.



ज्ञान-विद्या विभूषणम्

प्रो. रजनीश जैन
सचिव

Prof. Rajnish Jain
Secretary



सत्यमेव जयते

विश्वविद्यालय अनुदान आयोग
University Grants Commission

(भारतीय मानव संसाधन विकास विभाग, भारत सरकार)
Ministry of Human Resource Development, Govt. of India

बहादुरशाह जफर मार्ग, नई दिल्ली-110002
Bahadur Shah Zafar Marg, New Delhi-110002

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D.O.No.F.1-1/2018(Journal/CARE)

December, 2019

Respected Sir/Madam,

University Grants Commission in its 543rd meeting held on 9th August, 2019 approved two Credit Courses for awareness about publication ethics and publication misconducts entitled "Research and Publication Ethics (RPE)" to be made compulsory for all Ph.D. students for pre-registration course work (attached as Annexure).

In view of the above, you are requested to ensure that the above two Credit courses may be made compulsory for all Ph.D. students for pre-registration course work undertaken in your University from the forthcoming academic session.

With regards,

Yours sincerely,

(Rajnish Jain)

TO THE VICE-CHANCELLORS OF ALL UNIVERSITIES

ANNEXURE

Course Title:

- **Research and Publication Ethics (RPE)**-Course for awareness about the publication ethics and publication misconducts.

Course Level:

- 2 Credit course (30 hrs.)

Eligibility:

- M.Phil., Ph.D. students and interested faculty members (It will be made available to post graduate students at later date)

Fees:

- As per University Rules

Faculty:

- Interdisciplinary Studies

Qualifications of faculty members of the course:

- Ph.D. in relevant subject areas having more than 10 years' of teaching experience

About the course

Course Code: CPE- RPE

Overview

- This course has total 6 units focusing on basics of philosophy of science and ethics, research integrity, publication ethics. Hands-on-sessions are designed to identify research misconduct and predatory publications. Indexing and citation databases, open access publications, research metrics (citations, h-index, Impact Factor, etc.) and plagiarism tools will be introduced in this course.

Pedagogy:

- Class room teaching, guest lectures, group discussions, and practical sessions.

Evaluation

- Continuous assessment will be done through tutorials, assignments, quizzes, and group discussions. Weightage will be given for active participation. Final written examination will be conducted at the end of the course.

ABP

Course structure

- The course comprises of six modules listed in table below. Each module has 4-5 units.

Module	Unit title	Teaching hours
Theory		
RPE 01	Philosophy and Ethics	4
RPE 02	Scientific Conduct	4
RPE 03	Publication Ethics	7
Practice		
RPE 04	Open Access Publishing	4
RPE 05	Publication Misconduct	4
RPE 06	Databases and Research Metrics	7
	Total	30

Syllabus in detail

THEORY

- RPE 01: PHILOSOPHY AND ETHICS (3 hrs.)**

- Introduction to philosophy: definition, nature and scope, concept, branches
- Ethics: definition, moral philosophy, nature of moral judgements and reactions

- RPE 02: SCIENTIFIC CONDUCT (5hrs.)**

- Ethics with respect to science and research
- Intellectual honesty and research integrity
- Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP)
- Redundant publications: duplicate and overlapping publications, salami slicing
- Selective reporting and misrepresentation of data

- RPE 03: PUBLICATION ETHICS (7 hrs.)**

- Publication ethics: definition, introduction and importance
- Best practices / standards setting initiatives and guidelines: COPE, WAME, etc.
- Conflicts of interest
- Publication misconduct: definition, concept, problems that lead to unethical behavior and vice versa, types
- Violation of publication ethics, authorship and contributorship
- Identification of publication misconduct, complaints and appeals
- Predatory publishers and journals

PRACTICE

- RPE 04: OPEN ACCESS PUBLISHING(4 hrs.)**

[Handwritten signature]

1. Open access publications and initiatives
2. SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies
3. Software tool to identify predatory publications developed by SPPU
4. Journal finder / journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

• **RPE 05: PUBLICATION MISCONDUCT (4hrs.)**

A. Group Discussions (2 hrs.)

1. Subject specific ethical issues, FFP, authorship
2. Conflicts of interest
3. Complaints and appeals: examples and fraud from India and abroad

B. Software tools (2 hrs.)

Use of plagiarism software like Turnitin, Urkund and other open source software tools

• **RPE 06: DATABASES AND RESEARCH METRICS (7hrs.)**

A. Databases (4 hrs.)

1. Indexing databases
2. Citation databases: Web of Science, Scopus, etc.

B. Research Metrics (3 hrs.)

1. Impact Factor of journal as per Journal Citation Report, SNIP, SJR, IPP, Cite Score
2. Metrics: h-index, g index, i10 index, altmetrics

References

- Bird, A. (2006). *Philosophy of Science*. Routledge.
- MacIntyre, Alasdair (1967) *A Short History of Ethics*. London.
- P. Chaddah, (2018) *Ethics in Competitive Research: Do not get scooped; do not get plagiarized*, ISBN:978-9387480865
- National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009). *On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition*. National Academies Press.
- Kesnik, D. B. (2011). What is ethics in research & why is it important. *National Institute of Environmental Health Sciences*, 1-10. Retrieved from <https://www.niehs.nih.gov/research/resources/bioethics/whats/index.cfm>
- Beall, J. (2012). Predatory publishers are corrupting open access. *Nature*, 489(7415), 179-179. <https://doi.org/10.1038/489179a>
- Indian National Science Academy (INSA). *Ethics in Science Education, Research and Governance*(2019), ISBN:978-81-939482-1-7. http://www.insaindia.res.in/pdf/Ethics_Book.pdf

J. B. Patel

Dr. Rammanohar Lohia Avadh University, Ayodhya

Ph.D. Course work for academic session 2022-23

Subject- Economics

Course Title:

- Computer Application (Paper III).

Course Level:

- 5 Credit course (75 Hrs),

Eligibility:

- M.Phil., Ph.D. students and interested faculty members.

Fees:

- As per University Rules,

Faculty

- Interdisciplinary Studies.

Qualifications of faculty members of the course:

- Ph.D. in relevant subject areas having more than 10 years of teaching experience.

About the course

- **Course Code: CA**
- **Evaluation:** Continuous assessment will be done through tutorials, assignments quizzes, and group discussions. Weightage will be given for active participation. Final written examination will be conducted at the end of the course.
- **Course Structure**

S.No.	Unit Title	Teaching Hours
1	Fundamentals of computers	10
2	Word processing	18
3	Spreadsheet Tools:	15
4	Presentation Tool:	20
5	Web search	12

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SYLLABUS IN DETAIL

UNIT-1 Fundamentals of computers

(10 Hrs.)

Hardware and software. Different operating systems, Application programmes. Programming language concepts.

UNIT-2 Word processing

(18 Hrs.)

Introduction to word processing. MS-Word-creation of files arrangement of files in folders. saving documents as files, print, formatting, inserts, page layout, references (citation and bibliography), Review [comments, tracking, compare], converting to pdf.

UNIT-3 Spreadsheet Tools

(15 Hrs.)

Introduction to spreadsheet application, features and functions, data sorting, features of statistical data analysis; generating charts/graphs and other features. Tools used may be Microsoft excel, open office or similar tools.

UNIT-4 Presentation Tool

(20 Hrs.)

Introduction to presentation tools, features and functions, at creating presentation, customizing presentation, showing presentation, Tools used may be Microsoft power Point, open office or similar tools. Statistical and other Software Packages (STATA, SPSS): Students will learn to use software to analyse macro data.

UNIT-5 Web search

(12 Hrs.)

Introduction to internet, use of internet and WWW, using search engine like Google, Yahoo etc. using advance search techniques, use of internet in research activities, submission of paper in archive electronics mail system, cyber law.

J. B. Patil

Dr. Rammanohar Lohia Avadh University, Ayodhya

Ph.D. Course work for academic session 2022-23

Subject- Economics

Course Title:

- **Research Methodology (Paper II)**

Course Level:

- 5 Credit course (75 Hrs).

Eligibility:

- M.Phil., Ph.D. students and interested faculty members.

Fees:

- As per University Rules.

Faculty

- Interdisciplinary Studies.

Qualifications of faculty members of the course:

- Ph.D. in relevant subject areas having more than 10 years of teaching experience.

About the course

- **Course Code: RM**
- **Evaluation:** Continuous assessment will be done through tutorials, assignments quizzes, and group discussions. Weightage will be given for active participation. Final written examination will be conducted at the end of the course.

- **Course Structure**

S. No.	Unit No	Teaching Hours
1	Unit 1	15
2	Unit 2	15
3	Unit 3	15
4	Unit 4	10
5	Unit 5	20

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Syllabus in Detail

UNIT-1

(15 Hrs.)

- 1.1 Research Concept and its Types, Research Process.
- 1.2 Qualitative and Quantitative research: participatory research techniques, SWOT analysis, semi structured interview, group discussion, focus group discussion, case studies.
- 1.3 Selection and Formulation of Research Problem, Guidelines for Literature Review, Research Gap.
- 1.4 Research Design - concept, need and classification.

UNIT-2

(15 Hrs.)

- 2.1 Data Collection - sources and tools, Data Analysis.
- 2.2 Statistical analysis, acquaintance with different kinds of statistical software packages (SPSS, STATA software).
- 2.3 Measures of Central Tendency, Measures of Dispersion.
- 2.4 Correlation and regression, multivariate analysis

UNIT-3

(15 Hrs.)

- 3.1 Sampling and Sampling Design- Population and Sample, Characteristics of a good sample.
- 3.2 Types of Sampling Design, Sampling Errors.
- 3.3 Concept of Hypothesis; Hypotheses Testing-Procedure; Chi-square (X^2) test, *T-test* and *F-test*. Test of Independence of Attributes, Test of goodness of fit.

UNIT-4

(10 Hrs.)

- 4.1 Chi Square (X^2) distribution

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- 4.2 Analysis of Variance (ANOVA)
- 4.3 One-way ANOVA, Two-way ANOVA
- 4.4 Utility of ANOVA Techniques

UNIT-5

(20 Hrs.)

- 5.1 Preparation of Review, articles, reports and research papers for journals and thesis.
- 5.2 Preparation of research proposals for different funding agencies.
- 5.3 Properties & Preparation of a good questionnaire.
- 5.4 Features of a good research proposal.
- 5.5 Features of a good research report (Dissertation and Thesis)

Required Text & Supporting Material

- R1. C.R. Kothari, Gaurav Garg-"Research Methodology" New Age International Publishers, 2018.
- R2. Naresh Malhotra, Marketing Research: An Applied Orientation (Pearson), 2019.
- R3. Prasant Sarangi, Research Methodology (Taxmann), 2010.
- R4. Ranjit Kumar, Research Methodology: a step-by-step guide for beginners (Sage), 2014.
- R5. G. Nageswara rao, Research Methodology and Quantitative Methods (BS Publications), 2018.
- R6. Alan Bryman, Social Research Methods (Oxford), 2016
- R7. JK Sharma - "Business Statistics", Pearson Education, 2014.
- R8. Levin and Rubin, Statistics for Management (Pearson), 2017.
- R9. Dr. S.P. Gupta-"Statistical Methods" Sultan Chand & Sons, 2014.
- R10. Statistical Methods for Research Workers by Fisher R. A., Cosmo Publication, New Delhi ISBN:81-307-0128-6.
- R11. Design and Analysis of Experiments by Montgomery D.C. (2001), John Wiley, ISBN: 0471260088 Research Methodology: A step by step for beginners by Ranjeet Kumar, Sage Publication.

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M.A.(Economics)
Semester I (Year I)

Core Paper-I

History of Economic Thoughts

- Module-1 Ancient and Modern Indian Economic Thoughts: Kautilya, Dada Bhai Naoroji, M.K. Gandhi, B.R. Ambedkar, R.M. Lohiya, Decndayal Upadhyaya.
- Module-2 Pre-classical Thoughts: Mercantilism, Physiocrats, classical Thoughts, Adam Smith, David Ricardo, Malthus, J.S. Mill.
- Module-3 The Socialists: Sismondi, St. Simon, Karl Marx, Associationism – Robert Owen, The Historical School.
- Module-4 Neo classical Thoughts: A. Marshall, J.M. Keynes, The Nationalists: Friedrich List, The Austrian school: Vonwieser, Bohm Bawerk.

Basic Reading List:-

- 1- Schumpeter, J.A.- History of Economic and Analysis.
- 2- Verma N.M.P.- Economics Thought of Ambedkar.
- 3- Grey, A.- History of Economic Doctrine.
- 4- Haney- History of Economic Thought.
- 5- Datta, B.- Indian Economic Thought Vol. I
- 6- Hazela- A History of Economic Thought.

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M.A.(Economics)
Semester I (Year I)
Core Paper-II
Micro Economic Analysis

- Module-1 Basic Economic Problem - Choice and Scarcity; Deductive and Inductive Methods of Analysis; Elasticities (Price, Income and Cross) of Demand- Theoretical Aspects and Empirical Estimation; Estimation; Elasticity of supply.
- Module-2 Consumer's Behaviour:- Cardinal Utility Analysis; Indifference Curve Analysis; Consumer's Surplus (Marshall and Hick's View) ; Revealed Preference Theory.
- Module: 3- Theory of Production: Production Function; Short-run and long-run Production Function, Cobb- Douglas Production Function; Iso-Product Curve, Producer's Equilibrium; Returns to Scale
- Module:4- Theory of Pricing: Perfect Competition; Monopoly; Monopollstic competition and Oligopoly.

Basic Reading List:

1. Koutsoyiannis, A.; **Modern Microeconomics**, Macmillan press, London.
2. Das, S.P.: **Microeconomics for Business**, Sage Publication, New Delhi.
3. व्यक्ति अर्थशास्त्र – प्रो० एस० एन० लाल, शिवम पब्लिशर्स, इलाहाबाद।
4. व्यक्ति आर्थिक विश्लेषण– डॉ० अनुपम अग्रवाल, SBPD, Agra.
5. माइक्रो अर्थशास्त्र – डॉ० एम० एल० सेठ, laxmi Narain pub, Agra.
6. Sen, A.: **Micro Economics: Theory and Application**, Oxford University Press, New Delhi.

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M.A.(Economics)
Semester I (Year I)

Core Paper-III

Problems of Indian Economy: Basic Issues

- Module:1- Structure and Basic features of Indian Economy; Changes in Economy in Planning Period; Demographic structure, features and Population Policy; Occupational Distribution; Rural-Urban Migration.
- Module:2- National Income: Trends, Compositions and Structural Change; Income Distribution and Income Inequality, Regional Disparities.
- Module:3- Poverty in India: Concepts, Absolute and Relative Poverty, Analysis of Poverty in India, Poverty Alleviation Programmes; Poverty and Unemployment.
- Module:4- Agriculture Sector: Role of Agriculture, Interrelationship between Agriculture and Industry, Growth of Indian Agriculture. Institutional Aspects - Land Reform, Technological change in Agriculture, Agriculture price Policy in India, Agriculture Finance, Agriculture Marketing.

Basic Reading list :-

- 1- Dutt R. and Sundhram, KPM: Indian Economy, S. Chand & Co. Ltd.
- 2- Agrawal, A.N.: Indian Economy, New Edge, New Delhi.
- 3- Mishra, S.K. and Puri, V.K. : Indian Economy, Himalayan Pub. Mumbai.
- 4- Dandekar, V.M. and Rath, N. : Poverty of India.
- 5- Kapila, Uma., Indian Economy: Since Independence.
- 6- Parikh, K.S., India Development Report- 1999-2000, Oxford University Press.

As per

M.A.(Economics)
Semester I (Year I)
First Elective Paper
Statistical Methods

- Module-1 Nature and scope of statistics. Collection of data Classification and Tabulation of data, Diagrammatic and graphic representation of data.
- Module-2 Measures of Central tendency - Mean Median, Mode, Harmonic Mean and Geometric Mean relative efficacy
- Module-3 Measures of Dispersion: Range, Quartile Deviation, Mean deviation, Standard deviation and its coefficient, Skewness and kurtosis Moment up to fourth order.
- Module-4 Index Number: Concept and importance of index number, chain base and fixed base index number, Simple and Weighted index number, Fisher's Index number, Tests for an ideal index number, concept and Component of time series.

Basic Reading list :-

1. गुप्ता के.एल., प्रारम्भिक सांख्यिकी, नवयुग साहित्य सदन आगरा।
2. सिंह एस०पी०, सांख्यिकी : सिद्धान्त एवं व्यवहार, एस० चन्द एण्ड क० नई दिल्ली।
- 3- Elhans D.N; Elements of Statistics.
- 4- गुप्ता वी०एन० सांख्यिकी ; साहित्य भवन आगरा।
- 5- नागर, कैलाशनाथ सांख्यिकी के मूल तत्व, मीनाक्षी प्रकाशन मेरठ।
- 6- Monga, G.S.: Statistics

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M.A.(Economics)
Semester I (Year I)
First Elective Paper
Infrastructure Development of India

- Module-1 **Infrastructure: Meaning and Types, Infrastructure, and Economic Development; Challenges of Infrastructure Development; Infrastructure as a public Good; Social and Physical Infrastructure, Special Characteristics of Public Utilities.**
- Module-2 **Transport: Role of Transport in Economic Development; Growth of Road Network in India; Transport Policy of India; The Structure of Transport Cost and Location of Economic Activities; Need for Privatisation in Transport Infrastructure, Public-Private-Partnership; Limitations of Privatisation Policy.**
- Module-3 **Social Infrastructure: Significance of Education to Economic Development; Expenditure on Education, Structure of Higher Education and Problems of its financing in India. Human Resource and Human Capital Development, Health Dimensions of Development, Determinants of Health- Poverty, Mal- Nutrition, Illiteracy and Lack of Information, Financing of Health Care; Inequalities. in Health.**
- Module-4 **Energy:- A Brief Introduction and Development of Energy Sector, Factors Determining Demand For Energy; Energy Conservation; Importance of non-conventional Energy Sources; Energy Crisis in India, Energy Modelling; Problems of Infrastructure Development in India.**

Basic Reading list :-

- 1- Misra, S.K. and Puri, V. K. : Indian Economy, Himalyan Publishing House, N. Delhi
- 2- Agrawal, A.N. and Agrawal, M.K. : Indian Economy, New Age International Pvt. Ltd. N. Delhi.
- 3- Parikh, K.S.: India Infrastructure Report 2012, Oxford University Press, N. Delhi.
- 4- Crew, M. W. and Kleindasfer, P.R.: Public Utilities Economics, Macmillan, London.
- 5- Uma Kapila, Indian Since Independence, Academic Foundation, New Delhi.
- 6- Government of India, Economic Survey (for different years).



**M.A.(Economics)
Semester I (Year I)
Second Elective Paper
Project Presentation**

The M.A. Students in the First Semester (Second Elective) would be required to do project Work which is to be related to the elective area chosen by the students. The Project work would be evaluated by an internal and external examiners appointed by the university.

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M.A.(Economics)
Semester II (Year I)
Core Paper-I
Advanced Economic Theory

- Module-1 Equilibrium Analysis: Types of Equilibrium; General and Partial Equilibrium; Stability of Equilibrium; Cobweb Theorem.
- Module-2 Criticism of Neo-classical Theory of firm. Alternative Theory of firm- Baumol, Williamson, Marris models, Bain's Limit Pricing Theory.
- Module-3 Theory of Distribution: Theory of Factor Pricing; classical and Modern Theories of Rent; Quasi-Rent; Modern Theory of Interest (IS-LM Model); Adding-up Problem. Theory of Profit - Knight and Shackles.
- Module-4 Welfare Economics: Pareto Optimal conditions; Kaldor- Hicks Compensation Principles; Scitovsky's Double Criteria; Bergson's Social Welfare function and Arrow's Possibility Theorem.

Basic Reading List –

- 1- H.L. Ahuja: Advanced Economic Theory, S. Chand & Comp. New Delhi.
- 2- Mishra & Puri : Advanced Economic Theory, Himalyan Publication New Delhi.
- 3- Koutsoyiancius, A.: Modern Micro Economics, Macmillan.
- 4- Stonier, A.W. and D.C. Hauge, A Textbook of Economic Theory, ELBS & Longman Group, London.
- 5- Lipsey, R.G. and Chrystal, K.A.: Principles of Economics Oxford Univ. Press.
- 6- Gould and Ferguson, Micro Economic Theory



M.A.(Economics)
Semester II (Year I)

Core Paper-II

Indian Economy: Industrial & External Sector

- Module-1 Industrial Sector: Growth and Structure of Indian Industries; Industrial Productivity- Measurement and Trends; Industrial Policy in India; Policies towards public Sector Enterprises- Privatisation and Disinvestment Issue.
- Module-2 Cottage and Small Scale Industries: Policies towards Cottage and small-scale Industries: Industrial Sickness, Problem of underutilization of capacity.
- Module-3 Trends and performance in Services; Compositions and Direction of foreign Trade of India; Inflow and outflow of foreign capital and MNC's in India.
- Module-4 Economic Reforms: Fiscal and Financial Sector Reform; Globalisation of Indian Economy; WTO and its Impact on Indian Economy; Issues in competition and Safety Nets in Indian Economy.

Basic Reading List:-

- 1 Dutt, R. and Sundhram, KPM: Indian Economy, S.Chand & Co.
- 2 Kapila, Uma: Indian Economy (Since Independence)
- 3 Jalan, B: The Indian Economy: Problem and Prospects, Viking, N.Delhi.
- 4 Ahluwalia, I.J. and Little, I.M.D.- India's Economic Reforms & development, Oxford Uni. Press. N.Delhi.
- 5 Dandekar, V.M. and N. Rath, Poverty of India
- 6 Agarwal, A.N., Indian Economy, Himalaya Publishing House, Mumbai.

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M.A.(Economics)
Semester II (Year I)
Core Paper-III
Quantitative Methods

- Module-1 Correlation Analysis: Concept and Types of Correlation, degree of Correlation. Karl Pearson's Correlation and Spearman's Rank Correlation coefficient. Partial and multiple Correlation.
- Module 2 Regression Analysis: Concept and functions of Regression lines, Regression Equations, Regression coefficient, Regression equations by Regression coefficient Method, Regression equations by least square method, Standard error of the estimate, Ratio of variation.
- Module 3 Interpolation & extrapolation: Concept and Assumptions of interpolation and extrapolation, Direct Binomial Expansion method, Newton's method of Advancing Differences, Lagrange's method of interpolation and extrapolation.
- Module 4 Concept, origin and development of Probability, Permutations and Combinations Rules of Probability : Addition & multiplication Theorem, conditional probability, Bernaulli's theorem, inverse probability, Binomial, Poisson and Normal Distribution.

Basic Reading List:-

- 1- गुप्ता के०एल०, अग्रवाल रविकान्त एवं जैन परवीन : परिमाणात्मक विधियाँ ; नवनील प्रकाशन गृह आगरा।
- 2- गुप्ता के०एल० एवं गुप्ता हरिओम : परिमाणात्मक तकनीकें; नवयुग साहित्य सदन आगरा।
- 3- शुक्ल एस०एन० एवं सहाय शिवपूजन : परिमाणात्मक पद्धतियाँ; साहित्य भवन पब्लिकेशन, आगरा।
- 4- नागर कैलाशनाथ एवं नित्तल एस०एन० : सांख्यिकी के मूल तत्व, मीनाक्षी प्रकाशन, मेरठ।
- 5- Elhance, D.N. : Statistical Theory.
- 6- Monga, G.S. : Statistics.



M.A.(Economics)
Semester II (Year I)
Third Elective Paper
Industrial Economics

- Module-1 Introduction: Meaning, Need, Scope and Significance of Industrial Economics, Large and Small Scale Industries, Public Sector- Importance and Problems. Sources of Industrial Finance in India, Development of Financial Institutions and capital Market in India.
- Module-2 Industrial location: Factors Affecting Location of Industries, Theories of Location: Weber, Florence, Industrial Imbalance Causes and Measures, Determinants of Location.
- Module-3 Scientific Management, Present Management Pattern in India, Worker Participation in Management. Rationalisation.
- Module-4 Industrial Efficiency Productivity and its measurement, Factors Affecting productivity, size of firm and productivity, capacity efficiency.

Basic Reading List:-

- 1- Ahluwalia, I.J. (1985), Industrial Growth in India, Oxford University Press, New Delhi.
- 2- Barthwal, R.R. (1985), Industrial Economics, Wilcy Eastern Ltd., New Delhi.
- 3- Cherunilam, F. (1994), Industrial Economics: Indian Perspective (3rd Edition), Himalaya Publishing House, Mumbai.
- 4- Desai, B. (1999), Industrial Economics in India (3rd Edition), Himalaya Publishing House, Mumbai.
- 5- Divine, P.J. and R.M. Jones et al. (1976), An Introduction to Industrial Economics, George, Allen and Unwin Ltd., London.
- 6- Government of India, Economic Survey (Annual).

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M.A.(Economics)
Semester II (Year I)

Third Elective Paper

Environmental Economics

- Module-1 **Environmental Economics** - Meaning and scope, Environment and Economy: Neo-Classical and Ecological Economic Perspective, Interlinkages, Environment and Development Trade-off. Function of Environment.
- Module-2 Deviation from Economic Efficiency, Pollution and Externality Environmental Quality as a Public Good, Case of Market Failure, Social Optimum Level of Pollution and changes it.
- Module-3 Economics of **Environmental Law Regulations**: Liabilities Laws, Allocation of Property Rights, Emission Standards, Pollution Tax and Transferable Pollution Permit.
- Module-4 Limits of Growth: Malthusian, Neo-Classical and Ecological Economic Perspectives, **Sustainable Development** : Concept, Rules, Approaches to Sustain ability and Indicators. Common Property Resources : Problem of Management, Issue of Climate Change.

Basic Reading List:-

- 1- Ehrlich, P₂A. Ehrlich and T. Hiden. Economics, populati on, Resources, Environment, W. H. Freeman, Sam Franciso.
- 2- R. N. Bhattacharya: Environmental Economics, Air India Perspective, Oxford University Press.
- 3- नामा माहेश्वरी : पर्यावरण अर्थशास्त्र- एक भारतीय परिपेक्ष्य आनन्द पब्लिकेशन, नई दिल्ली।
- 4- Erach Bharucha: Environmental Studies, Orient Longman.
- 5- Thomas & Callan : Environmental Economics.
- 6- Ahmad, M. Hussen: Principl of Environmental Economics, Poulledge & Tylor & Francis Group.

J. Nepal

M.A.(Economics)
Semester II (Year I)
Fourth Elective Paper
Project Presentation/ Field Visit

The M.A. Students in the Second Semester (Fourth Elective) would be required to do project Work/ Field work which is to be related to the elective area chosen by the students. The Project work/ Field work would be evaluated by an internal and external examiners appointed by the university.

J. B. P. S.

M.A.(Economics)
Semester III (Year II)
Core Paper-I
Monetary Economics

- Module-1 Concept and function of money, Significance of money, Money in Closed and open Economy, Paper Currency Standard and Principles of Note issue.
- Module-2. Value of money and its measurement, Quantity theory of money- Fisher and Cambridge approach, Fundamental equation of keyness. Saving and Investment theory of money.
- Module-3 Concept of money supply, RBI Approaches to money supply, Determinants of money Supply, High Powered money and money multiplier Deficit Financing and money supply, money Supply and open economy, control of money supply.
- Module-4 Objectives and tools of Monetary Policy. monetary Policy and economic growth, Central Banking: Meaning, Functions and Credit Control International Monetary institutions, Role of SDR Problem of International Liquidity, Monetary Concept of Trade cycle.

Basic Reading List:-

- 1- Gupta Suraj Bhan : Monetary Economics.
- 2- Jhingan M.L. मौद्रिक अर्थशास्त्र, वृन्दा पब्लिकेशन प्रा० लिमिटेड, दिल्ली।
- 3- Sinha V.C. : मौद्रिक अर्थशास्त्र, लोक भारती प्रकाशन, इलाहाबाद।
- 4- T.T. Sethi : मौद्रिक अर्थशास्त्र, लक्ष्मी नारायण अग्रवाल, आगरा।
- 5- G.C. Singhai : मौद्रिक अर्थशास्त्र, साहित्य भवन पब्लिकेशन, आगरा।
- 6- Srivastava Narendra Nath : मौद्रिक अर्थशास्त्र, उत्तर प्रदेश हिन्दी संस्थान, लखनऊ।



M.A.(Economics)
Semester III (Year II)
Core Paper-II
International Economics

- Module-1 Theories of International Trade; Adam Smith, Ricardo, J.S. Mill, Haberler. Derivations of offer curve, offer curve and Trade Equilibrium.
- Module-2 General Equilibrium Theory (Ohlin), Derivation of Community Indifference Curve and Trade Indifference Curve, Equilibrium through Box Diagramme.
- Module-3 Terms of Trade: Concepts, Measurements and Trends in Terms of Trade; Gains from Trade; Trade as Engine of Economic Growth- Alternative View; Singer-Prebisch's Hypothesis of Secular Deterioration of Terms of Trade.
- Module-4 Commercial Policy: Free Trade Vs Protection; Argument for and against the policy of protection; Theory of Interventions: Tariff and Quotas; Effects of Tariff under partial and general Equilibrium; Dumping and most favoured Nations Clause.

Basic Reading List:-

- 1- के.सी. राना एवं के.एन. वर्मा : अन्तर्राष्ट्रीय अर्थशास्त्र— विशाल पब्लिकेशन हाउस, जालन्धर, पंजाब।
- 2- Mannur, H.G.: International Economics, Vikas Pub. House N. Delhi.
- 3- Jhingan, M.L. : Int. Economics; Vrinda Publication, Agra.
- 4- M.C. Vaish & Sudama Singh : International Economics, Oxford and IBH Pub. N. Delhi.
- 5- Soderson, B : International Economics, Mac Millan Press Ltd. London.
- 6- Kindleberger, C.P. (1973), International Economics, R.D. Irwin, Homewood.



M.A.(Economics)
Semester III (Year II)
Core Paper-III
Economics of Growth & Development

- Module-1 **Basic Issue-** Economic Growth and Economic Development : Meaning, Concept, Measurement and Development; Economic Growth and Social Justice: Kuznets hypothesis, Growth Distribution Trade off. Basic needs approach, Hunger, Entitlement and Capability. Human Development - HDI, HPI, Prosperity Index, Gender Index.
- Module-2 **General Growth Theories-** Classical Theories: Adam Smith, Ricardo, Marx's theory of development, Theories of Schumpeter, Rostow, Harrod - Domar Growth Models; Neo classical Growth Models of Solow, Mead & Joan Robinson,
- Module-3 **Partial Growth Theories:** Theory of Big Push, Balance and Unbalanced Growth, Social and Technological Dualism, Lewis Model, Liebenstien's Critical Minimum Effort Thesis, Nelson's Theory of Low-level Equilibrium Trap, Myrdal Thesis, Dual Gap Analyses.
- Module-4 **Problem and Policy:** Population & Development, Poverty & Development, Capital formation & development, Globalization and Development of less developed countries. Investment Criteria WTO and developing Countries.

Basic Reading List:-

- 1- Gillis, M., D.H. Perkins, M. Romer and D.R. Snodgrass (1992), Economics of Development, (3rd Edition), W.W. Norton, New York.
- 2- Higgins, B. (1959), Economic Development, W.W. Norton, New York.
- 3- Hogendorn, J. (1996), Economic Development, Addison, Wesley, New York.
- 4- Kahkonen, S. and M. Olson (2000), A New Institutional Approach to Economic
- 5- Jhingan M.L., Economic Development.
- 6- Kindleberger, C.P. (1977), Economic Development, McGraw Hill, New York.

J. Jhingan

M.A.(Economics)
Semester III (Year II)
Fifth Elective Paper
Agriculture Economics

- Module-1 Nature and scope of Agricultural Economics; Role of Agriculture in a Developing Economy; Interdependence between Agriculture and Industry, Structural Problems in Agriculture.
- Module-2 Theories of Agriculture Development; Lewis, T.W. Schultz, Fei-Ranis. and Millor's Theory. Farm size and Productivity Relationship; W.T.O. and Indian Agriculture.
- Module-3 Land Reforms: Concepts, Progress; Co-operative and Collective farming; Technological change in Agriculture, Agriculture Marketing; Agriculture Price Policy in India, Production Function in Agriculture, Capital formation in Agriculture.
- Module-4 Indian Agriculture : Agriculture Finance; Land Utilization, New Agriculture Strategy; Cropping Pattern and Crop Insurance, Food Security, Food Policy. Public Distribution System.

Basic Reading List:-

- 1- Bhalla, G.S.: Indian Agriculture Since Independence, NBI.
- 2- Black, J.D.: Introduction of Economics for Agriculture, Macmillan.
- 3- Dandwala, M.L.: Indian Agricultural Development Since Independence, Oxford & IBH, N. Delhi.
- 4- Dash, Mrityunjay: Agricultural Economics, Anmol Prakarshan.
- 5- Sony, R.N., Leading Issues in Agriculture Economics.
- 6- Mishra, Jai Prakash, Agriculture Economics, Sahitya Bhavan Publication, Agra, 2006

J. Prakash

M.A.(Economics)
Semester III (Year II)
Fifth Elective Paper
LABOUR ECONOMICS

- Module-1 Definition, Nature, scope and importance of Labour Economics, characteristics of Labour, & Problems of Labour Market, Labour Productivity, Labour Migration. Demand and supply of Labour.
- Module-2 Concept and measurement of unemployment, Employment and Unemployment situation in India, Methods of recruitment and placement, Employment service organization in India, Lay offs, Retrenchment and exit policy, Employment Policies in India.
- Module-3 Women Labour: Gender Biasness in Labour Market, child Labour, India and I.L.O., Profit-sharing and co-partnership, labour and Rationalization.
- Module-4 Trade Union Movement in India. concept of Living, fair and Minimum wage Real and Nominal Wages, Theories of Wage Determination, Social Security of Labour, Concept of Social Security, Social Insurance and Social Assistance.

Basic Reading list :-

- 1- Bloom, Northrop, Rewen, Readings in Labour Economics.
- 2- Brown, Phelps, Economics of Labour.
- 3- Giri, V.V., Labour in Indian Industry.
- 4- Singh, R.R., Labour Economics.
- 5- Saxena S.C., Labour Problems and Social Security.
- 6- Sinha V.C., Labour Economics.

J. B. P. N.

**M.A.(Economics)
Semester III (Year II)
Sixth Elective Paper
Project Presentation**

The M.A. Students in the Third Semester (Six Elective) would be required to do project work which is to be related to the elective area chosen by the students. The Project work would be evaluated by an internal and external examiners appointed by the university.

J. B. Patel

M.A.(Economics)
Semester IV (Year II)

Core Paper-I

Macro Economic Analysis

- Module-1 Nature and scope of macro Economics Concept and measurement of National Income Circular flow of income in two, three and four sector economy Social accounting. Theory of output, income and employment - classical and Keynesian approach.
- Module-2 Consumption function: Keyne's Psychological law of consumption, Short run and long-run consumption function; Investment function: multiplier and accelerator, the marginal efficiency of Capital.
- Module-3 Demand for Money: classical and Keynesian approach, Post keynesian demand for money : Friedman & Patinkon Approach Keynesianism & Monetarism, Derivation of LM Curve.
- Module 4 Inflation and deflation : Concept, Causes and Types of inflation, Theories of Inflation: Monetarist, keynesian and sturctural theories of inflation, Phillips and modified Phillips curve, Deflation- Concept and causes of Deflation, effects of inflation and deflation, Control of inflation deflation.

Basic Reading List:-

- 1- Srivastwa N.N.; New Dimensions in monetary theory Print House India, Luck now.
- 2- सिंघई, जी०सी० एवं मिश्रा, जे०पी०; समष्टि आर्थिक विश्लेषण, साहित्य भवन पब्लिकेशन, आगरा।
- 3- झिंगन, एम०एल०; समष्टि अर्थशास्त्र, वृंदा प्रकाशन, आगरा।
- 4- Sinha V.C.; Monetary Economics.
- 5- Gupta Suraj Bhan; Monetary Economics.
- 6- Dornbasch, R. and F. Stanley Macroeconomic, McGraw Hill. Inc. New York.

S. J. Patel

M.A.(Economics)
Semester IV (Year II)
Core Paper-II
Public Economics

- Module-1 Introduction: Nature and Scope of Public Finance, Role of Government, in organized society, Role in mixed economy, Public and Private Sector. Principle of Maximum Social Advantage.
- Module-2 Public Expenditure: Pure theory of Public expenditure, Structure and Growth of Public expenditure, Wagner's law of increasing state activities, Wiseman peacock hypothesis, Zero base budgetary, classification of Public expenditure.
- Module-3 Taxation: Sources of Public revenue, canons of taxation, Direct and Indirect tax, Theories of incidence, Benefit and Ability to pay theories, Goods and service tax.
- Module-4 Public debt : classical view, sources of public debt, types, burden of public debt, types of budget deficits, Fiscal deficits, Deficits Financing concept, need, effects on economy, Fiscal Policy, Objectives, importance, and tools of fiscal policy, Fiscal policy in India.

Basic Reading List:-

1. Buchanan, J.M., The Public Finance, Richard D. Irwing, Homewood.
2. Goode, R. Government Finance in Developing Countries, Tata McGraw Hill, New Delhi.
3. Jha, R. Modern Public Economics, London.
4. Musgrave, R.A. and P.B. Musgrave, Public Finance in Theory and Practice, McGraw Hill, Tokyo.
5. Government of India, Long Term Fiscal Policy.
6. Bhargva, P.K., Centre State Resources Transfers in India, The Academic Press, Gurgaon.

J. Jha

M.A.(Economics)
Semester IV (Year II)
Seventh Elective Paper
Modern International Economics

- Module-1 Factor Proportion Theory: H-O Theorem; factor Price Equalisation; Leontief Paradox; Stolper- Samuelson Theorem, Rybezynski Theorem;
- Module-2 Economic Integration: The Theory of Customs Union; Effects of Customs Union-Static and Dynamic effects; Lipsey Model; Vanek Model.
- Module-3 Foreign Exchange Rate: Determination under Gold Standard; Purchasing power Parity Theory and Balance of Payment Theory; fixed and Flexible Exchange Rates; Exchange control and Exchange Management.
- Module-4 Balance payment: Meaning, Structure, Equilibrium and Disequilibrium; Adjustment Mechanism of Balance of payments; Devaluation and Absorption Approach for Adjustment in B.O.P.

Basic Reading List:-

- 1- Salvatore, D.: International Economics, Prentic Hall N. Delhi.
- 2- Krugman, P.R. and M. Obstfeld: International Economics: Theory and Policy
- 3- Sodersten, Bi International Economics.
- 4- Mithani, D.M.: International Economics.
- 5- Manner, H.G.: International Economics. Vikas Pub. House N. Delhi.
- 6- Rana, K. C. and Verma, K.N., अन्तर्राष्ट्रीय अर्थशास्त्र, विशाल पब्लिकेशन हाउस, जालन्धर।

J. B. P. W.

M.A.(Economics)
Semester IV (Year II)
Seventh Elective Paper
Demography

- Module-1 Demographic Analysis : Definitions, concepts, Subject matter, Importance and Tools. Demographic Data Nature, Scope and Sources. Census, Measurement of Population Growth, Structure of Population, Population Projection.
- Module-2 Population Theories: Malthus and Neo-Malthusian, optimum Theory, Logistic Curve Theory, Theory of Demographic Transition.
- Module-3 Demographic Measurements: Fertility- Total Fertility Rate (TFR), Gross Reproduction Rate (GRR), Net Reproduction Rate (NRR). Factors Affecting Fertility Socio-Economic Factors, Economic Status, Health, Education, Nutrition, Fertility Measurement, Fertility Trends India.
- Module-4 Mortality and Morbidity- Concepts and Measurement, Life Table-Construction Types and uses. Demographic Trends in Developed and Developing countries. Population Policy in India.

Basic Reading List:-

- 1- Agrawal, S.M.: India's Population Problem, Tata McGraw-Hill Co. Bombay.
- 2- Bose, A: India's Basic Demographic statistics, B.R. Pub - Crops N. Delhi.
- 3- Sinha, V.C. : Principles of Demographic Mayur Paperbacks, Noida.
- 4- Srinivasan, K: Basic Demographic Techniques and Application, Sage Pub. N. Delhi.
- 5- Bogue, D.J. (1971), Principal of Demography, John Welly, New York.
- 6- Gulati, S.C.(1988), Fertility in India: An Econometric Study of a Metropolis, Sage, New Delhi.



M.A.(Economics)
Semester IV (Year II)
Research Project/ Dissertation
Dissertation

The M.A student in the fourth semester (Year-II) would be required to write a dissertation which is to be related to the field work submitted by the student. The dissertation would be evaluated by an internal and external examiners appointed by the university.

ABP

Syllabus for the Program - M.A. Subject: Political Science

Course Code		Course Title	Cred Its	T/P	Evaluation	
A	B	C	D	E	F	G
	Core	History of Western Political Thought - I (Plato to Burke)	5	T	25	75
	Core	Comparative Politics - I	5	T	25	75
	Core	Indian Government and Politics - I	5	T	25	75
	First Elective Select any one	Public Administration	5	T	25	75
		Dynamics of Indian Politics	5	T	25	75
	Second Elective Select any one	Theories of Social Change, Social Movement and Revolution	5	P	50	50
		Feminism and Gender Justice	5	P	50	50
SEMESTER - II (YEAR I)						
	Core	History of Western Political Thought - II (Bentham to Present Day)	5	T	25	75
	Core	Comparative Politics - II	5	T	25	75
	Core	Indian Government and Politics - II	5	T	25	75
	Third Elective Select any one	Indian Administration	5	T/P	50	50
		Democracy and Human Rights in India	5	T/P	50	50
	Fourth Elective Select any one	Public Policy	5	T/P	50	50
		Contemporary Political Issues in India	5	T/P	50	50

SEMESTER - III (YEAR - I)

Course Code		Course Title	Credits	T/P	Evaluation	
A	B	C	D	E	F	G
	Core	Political Thinkers of Ancient India	5	T	25	75
	Core	Contemporary Political Ideologies	5	T	25	75
	Core	International Politics - I	5	T	25	75
	Fifth Elective select any one	International Organisation	5	T	25	75
		India's Foreign Policy	5	T	25	75
	Sixth Elective select any one	Democracy and Development Process in India	5	P	50	50
		Research Methods in Social Sciences Political Sociology	5	P	5	50

SEMESTER IV (YEAR II)

	Core	Political Thinkers of Modern India	5	T	25	75
	Core	International Politics - II	5	T	25	75
	Seventh Elective select any one	State Politics of India (With special Reference to UP)	5	T/P	25/5	75/5
		Local Self Government	5	T/P	25/50	75/50
		Political Sociology Research Methods in Social Sciences	5	T/P	25/50	75/50
	Research Project/ Dissertation	DISSERTATION	10	P	50	50

Dr. Ram Manohar Lohia Avadh University, Ayodhya
Syllabus for M.A. (Political Science)

Program - M.A. Subject - Political Science
1st Semester (Year 1)

Core Subject - Paper 1

Course Title - History of Western Political Thought - I
(Plato to Burke)

UNIT - I

General Characteristics of Pre-Socratic Greek Political thought, The Sophists, and their Political Ideas, Plato, Aristotle.

UNIT - II

St. Augustine, St. Thomas Aquinas, Marsiglio of Padua

UNIT - III

Machiavelli, Jean Bodin

UNIT - IV

Thomas Hobbes, John Locke,
Jean Jacques Rousseau

UNIT - V

Montesquieu, Admond Barrk

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Program - M.A Subject (Political Science)
1st Semester (year 1)

Core Subject Paper - II

Comparative Politics - I

UNIT - I

Evolution of Comparative Politics as a Discipline, Nature and Scope, Present and Future trends.

UNIT - II

Approaches to the Study of Comparative Politics - Traditional & Modern, Behavior & Post Behavior approaches, Political Systems Approach, Structural - Functional - Almonds Model.

UNIT - III

Constitutionalism and Democratic Theory, Liberal, Classical and Contemporary, Federalism.

UNIT - IV

Party Systems - Classification & Role in Modern Societies, Pressure Groups.

UNIT - V

Civil Society and the State Political Leadership, Theories of Ruling Elites.

(These Concepts will be Studied in the light of the Constitution of U.K, U.S.A, Russia, Switzerland, France and India.)

M.A Political Science (Semester Ist)

Core Subject Paper III

Indian Government And Politics - I

UNIT - I

Background, Nature and Structure of Indian Polity, Nature of Colonialism and Nationalism - in India, Constituent Assembly, Approaches to the making of the Constitution.

UNIT - II

Sources of Indian Constitution, Salient features, Parliamentary Government.

UNIT - III

Fundamental Rights and Directive Principles of State Policy.

UNIT - IV

Constitutional Amendments and Constitutional - Review.

UNIT - V

Union State Relations, Recent Development.

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M.A Political Science (Semester I)

First Elective Paper IV

Public Administration.

UNIT - Ist

Meaning, Nature, Scope and Evolution of Public Administration as a discipline, Its role in Development of Societies, Public Administration and Private Administration.

UNIT - II

Major Theories - and Approaches to the Study of Public Administration

- (a) The classical theory of Management (Henry Fayol, Luther Gullick)
- (b) The Bureaucratic Theory (Max Weber)
- (c) The Scientific Management Theory (Taylor And his Associates)
- (d) The Human Relation Theory
- (e) Systems Approach
- (f) Behavioral Approach.

UNIT - III

Principles of Organization: Emerging Trends

UNIT IV

Administrative Behavior: Decision making, theories of Leadership, Communication

UNIT V

New Public Administration, New Public Management, Good Governance & Development, Civil Society, Citizen's charter, Right to Information.

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M.A Political Science

Semester I

First Elective paper IV

Dynamics of ~~Politics~~ Indian Politics

UNIT - I

Dynamics of Politics → Religion, Caste, Language.

UNIT - II

Politics of Defection, Minorities, Political - Agitation, Regionalism.

UNIT - III

Secularism, National Integration, Problem of Terrorism

UNIT - IV

Politics of Amendments, Politics of President Rule, Problem of Environmental Pollution.

UNIT - V

Nationalism & Hyper Nationalism, Media.

M.A Semester I (Political Science)

Paper IVth

Second Elective → Practical/Project Presentation

Theories of Social Change, Social Movements
& Revolution.

UNIT-I Social Change - Meaning & Theories

UNIT-II Revolution - Causes, Impact, Theories - Recent trends.

UNIT-III Theories of Social Movement - Emerging Issues

UNIT-IV New Social Movement, Meaning Theories
Role of Feminist, Environmental and
Human Rights Movements.

UNIT V Emerging Issues →

- (a) New Liberation Movement
- (b) The new anti Corruption Movement in India
- (c) The NGO Phenomenon
- (d) Impact of Information Technology on
Social Mobilization.

M.A Political Science (Semester-I)

Paper -

Second Elective - Practical / Project Presentation

Feminism And Gender Justice

UNIT - I

Feminist Approach to Political Theory
Key Issues like Gender, Patriarchy and Theories
of Women's Subordination Public vs. Private.

UNIT - II Different Approaches to Feminism - Liberal, Socialist
Radical, Cultural Post Modernist, Eco-Feminism
Post Colonial, Post Marxist.

UNIT - III

Gender Justice - Theories of Justice, Equity &
Equality Empowerment, Law's as an Instrument of
Gender Justice and Social Change, Judiciary
and Gender Justice.

UNIT - IV

Gender Based Violence
Violation of Women's Rights

UNIT - V

United Nations and Gender Justice
Women's Rights as Human Rights.



M.A Semester II (Political Science)
Core Subject paper I

History of Western Political Thought - II
(Bentham to Present Day)

UNIT - I

Modern Political Thought, Nature and
Main features, Background.

UNIT - II

Jeremy Bentham, J.S. Mill, John Austin

UNIT - III

Immanuel
Emmanuel Kant, G.W.F. Hegel, T.H. Green,
Bernard Bosanquet.

UNIT - IV

Herbert Spencer, Karl Marx, Lenin, Stalin
Mao - Tse Tung

UNIT - V

H. J. Laski, G.D.H. Cole, Bertrand Russell,
H.D. Lasswell.

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M.A. Political Science (Semester II)

Core Subject Paper - II

Sem - II

Comparative Politics - II

UNIT - I Executive: Structure, Functions and Role

UNIT - II Legislature: Structure, Functions and Role

UNIT - III Judiciary: Structure, Functions, Independence, Judicial Review

UNIT - IV Bureaucracy, Theories of Representation, Political Conflict.

UNIT - V Public opinion, Political Development, Political Modernization.

UNIT - VI Notes: The above concepts are to be studied with special reference to the political systems of India, U.K, U.S.A, Switzerland and France.

M.A - Semester II (Political Science)

Core Subject Paper IIIrd

Indian Government and Politics - II

UNIT - I

Nature of Indian Federalism; Changing Patterns of Center-State relations, Demand for State Autonomy, Sarkaria Commission Report; An Analysis; Impact of Party System on Center-State relations, Inter-State Council

UNIT - II

Union Executive - President, Cabinet, Prime Minister, Legislature, Lok-Sabha, Rajya Sabha, Supremacy of Parliament, Speaker of Lok-Sabha.

UNIT - III

India's Judicial System - Supreme Court, Structure, Functions and Judicial Activism

UNIT - IV

State Government - Working of the Executive, Legislature and Judiciary; Local Self Government - The 73rd and 74th Amendments; Working of the Rural Local Self Government and Urban Local Self Government.

UNIT V

Public Opinion, Electoral System, Election Commission, Electoral Reforms, Voting Behaviour

M.A Semester II (Political Science)

Third Elective paper - III

Indian Administration

UNIT-I

Indian Administration: Its main features, Organizational Structure at union level and State levels, Central Secretariat, Ministries and Departments - Home Finance External Affairs

UNIT - II

Local Administration in India District Administration, Role of D.M and S.P, Welfare Administration.

UNIT - III

Civil Services in India Neutrals and Committed, Generalist vs. Specialists, Administrative Reforms, Planning in India.

UNIT - IV

Budget, Performance and Programme Budgeting, Comptroller And Auditor General of India, Lokpala and Lokayukta.

UNIT - V

Planning - History and Growth in India, Planning Process in India, NITI AAYOG - its organization, Structure and Functions, Economic Liberalization & Recent Initiatives

M.A Semester II (Political Science)

Third Elective Paper III⁰⁰

~~Democracy~~ **Human Rights In India**

UNIT - I

Development in India

Human Rights: National and International Dimensions, Fundamental Rights, Directive Principles of State Policy, Protection of Human Rights Act 1993

UNIT - II

Human Rights: Issues & challenges, Refugees and Displaced persons, Caste, Minorities, Women, children, Tribals, Bonded Labourers, People with Disabilities, Prisoners.

UNIT - III

Impact on Deprived Groups :- Gender Based violence, Caste Based violence, Discrimination, Fundamentalism, Organised Crime, Custodial Torture and Death

UNIT - IV

State Reference : Role of Police, Administration, ~~Army~~ and Paramilitary forces, Administration of Justice, Judicial Intervention and Activities, Judicial Commissions on Human Rights, Affirmative Actions for weaker Section, Development Strategies

UNIT - V

Civil Society - Media, Public Opinion and Human Rights, New Social Movements and NGOs, NHRC - National Human Rights Commission

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Public Policy

UNIT - I

Concept & Dimensions - Characteristics and Norms, Politics - Administration Relationship, Approaches to public Policy - Political Economy - Western, Marxist and Non-Western Traditions, Development Policy and Administration, Public Policy Approach - Post-Behavioral Approach, Public Choice Theory, Public Management Theory.

UNIT II

(a) Public Policy Process, Political, Constitutional, Legal, Administrative, socio-cultural, economic, environmental and Scientific

(b) Interfaces of the Policy Process - Institution, role of Public Policy planning & Analysis, Policy formulation, Implementation, evaluation.

(c) Role of Government, bureaucracy, parliament, courts, political parties, corporate sector, Interest Group, NGOs in policy Process.

UNIT-III

(a) Public Policy Analysis: Quantitative & Qualitative Models

(b) Public Policy Research and Development & Practical Issues.

UNIT IV

Public Policy in India - Nehruvian Model, Public Sector Undertaking, Economic Liberalization Model:

Privatization, Marketization, Privatization, State Society: WTO, Global Action Groups, Decentralization

Model: Panchayat Raj Institutions, Municipal Corporation

(c) Rural-Urban Development, Vision Model's Vision for India, Atmanirbhar Bharat, Swachhata Abhiyan, PDP Model, Sukanya Samriddhi Yojana, Jan Dhan Yojana, Atmanirbhar Bharat Yojana.

Manmohan Singh Model, Modi's Model

Fourth Elective Paper IV

Contemporary Political Issues in India

UNIT-I

Civil Society: Concepts, Features, Issues & its Relevance, in Indian Context. Human Rights: Concept & Its Importance, Human Rights Provisions in Constitution of India, Its Structures, Functions & Role.

UNIT - II

Globalization: Concept & Dimensions; Globalization and the Nation-State; Implications for India. Liberalization: Concept, Implication for India.

UNIT - III

- Gender Issues: Womens Rights & Women Liberation Movement, Remedial Measures.
- Environmental Issues, Movements for Protection of the Environment;

UNIT-IV

Terrorism: Concept, Causes & Implications of Terrorism for India.
Political Development: Issues in India, Problems & obstacles, The Issue of Regional Underdevelopment & Regional Movements in India - Causal factors: The Prospects of Political Development in India.

UNIT-V - Corruption, Lokpal, Lokayukta

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M.A. POLITICAL SCIENCE

SEMESTER - III

Core Paper - I

Political Thinkers of Ancient India Political Thought

UNIT - I Political Philosophy in Ancient India:
Problem of nomenclature, sources of study
and salient features.

UNIT - II Nature, purpose and functions of state in
ancient India, the theory of Saptanga.

UNIT - III The Vedic Poetry, Political Ideas in the
Vedic Samhitas, Brahmanas and the Upanishads
Political ideas of the Buddhists and the Jains.

UNIT - IV Kingship in the post Vedic age, the
political ideas in Ramayana, Mahabharat,
Bhagwatgita, earlier Mahapuranas and Smritis

UNIT - V Political Thinkers: Manu, Valmiki, Vyas, Kautilya,
Kautilya, Bhishma, Bishwaspati, Shukra,
Kamandaka, Somdevsuri

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M.A. Semester - III

paper - ~~II~~ II

Core paper II
Contemporary Political Ideologies

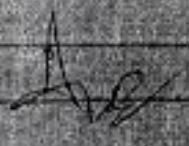

UNIT-I Rise of Scientific Politics, Political Science and political Philosophy, Politics as a search of Good Society.

UNIT-II Basic Concepts - Power, Authority and Influence, Political obligation and legitimacy.

UNIT-III Political Culture and Multi-culturalism, Political Participation, Political Development and Modernization

UNIT IV Liberalism and Libertarianism, Totalitarianism and Republicanism.

UNIT-V ~~and~~ Globalization, Post-Colonialism.

M.A. Semester - III

paper - ~~III~~ III

Core paper

International Politics - ~~II~~ - II

~~II~~ -

UNIT-I Meaning, Nature and Scope of International Politics, Concept of Post-International Politics, State and Non-State Actors (NSA)

UNIT-II Impact of Ideological & Technological Development on International Politics

UNIT-III Theories: Traditional & Contemporary, Realistic, Idealist theory, Marxist theory, World State theory, Equilibrium theory, Decision-Making and Game theory.

UNIT-IV Balance of Power, Collective Security, Ideology and National Interest.

UNIT V Cold war, Deterrence, Non-Alignment Movement - the major issues in International (NAM) Politics.

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M.A. Semester - III

~~Paper III~~

Elective Fifth

Fifth Elective

Paper IV International Organisation

UNIT-I - Meaning, Nature and Genesis of International Organization, League of Nations, - origin, ~~Structure~~ Achievements & Failures.

UNIT-II - UNO - Genesis, main organs, Specialized agencies, Revision of the UNO charter, Changing Prospects of world Government.

UNIT-III, Role of Secretary General in UNO, Role of Veto in the functioning of UNO, Peaceful Settlement of International disputes, Collective Security under the UNO, Peace keeping

UNIT-IV Specialized Agencies - UNESCO, ILO, WHO, IMF, UNICEF, FAO

UNIT-V Regional Organizations - NATO, EU, OPEC, ASEAN, BIMSTEC, Quad, BRICS, Nuclear Suppliers Group (NSG)

M.A. Semester - III

Paper - II - Elective Fifth

India's Foreign Policy.

UNIT-I Principles and Objectives of India's Foreign Policy, Domestic Determinants: Geography, History and Culture, Society and Political System.

UNIT-II - External determinants, Global, Regional and Bilateral.

UNIT-III Structure of Foreign Policy: Decision-making, Continuity and Changes in India's Foreign Policy.

UNIT-IV India's Foreign Policy in a comparative perspective, India and Super Powers.

UNIT V India's Policy towards her neighbours, India & U.N.O, India's approach to major global issues.

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M.A. Semester III
Sixth Elective Paper II

Democracy And Development Process In India.

UNIT-I

Relationship between Democracy & Development
Concept of Development, Concept of Human Development,
Gender Development Debates.

UNIT-II

Socio-economic Problem and Issues of Development in
India, Poverty, Social Backwardness and Disparities,
Role of Historical, Sociological and Economic Forces,
Hunger.

UNIT-III

Development Strategy and State Policies in India
Priorities, Target groups, Approaches & Methods.

UNIT-IV

Shift in Development Policies; Liberalization,
Privatization, Globalization; Implication for
Weaker Section, Critiques of Development and
Alternative Methods.

UNIT-V

Democracy, Decision Making & Development; Participatory
Development, Decentralised Planning.
Non-Governmental Initiatives & Peoples
Empowerment.

Dr. A. K. Singh

M.A Semester ~~III~~ (Political Science)

Sixth Elective Paper ~~IV~~ III

Seventh

Research Methods in Social Science

UNIT-I

General remarks about Social Science and Natural Science Research, Limitations of Social Science Research, Importance of Theories and facts in Research.

UNIT-II

Social Science research and Public Policy, Basic parameters of I.R. Research

UNIT-III

Sources of Information, Classification and Documentation: Techniques of Data Collection (Personal Observation Method, Respondents Perception, Survey Method, Experimental Method): Classification & tabulation of Information, Graphical and Diagrammatical Representation of Information.

UNIT-IV Comparison and Analysis of Information: Application of Averages and measure of Central Tendency such as mean, median and Partitioned values.

Measures of Dispersion, Theories of Sampling: Importance of Sample, its characteristics, Difference between Large & small Sample, parameters and Statistics, Sample Types (simple, systematic, stratified).

UNIT-V Identification of Research Problems and Research Design: Formulating a Hypothesis & Writing Thesis.

M.A Semester IV (Political Science)

Core Subject paper I

Political Thinkers of Modern India

UNIT - I

An Overview of Modern Indian Political Thought & Its Development, Raja Ram Mohan Roy, Dayananda Saraswati, Swami Vivekananda.

UNIT - II

Mahadev Govind Ranade, Gopal Krishna Gokhale, Bal Gangadhar Tilak.

UNIT - III

M.K. Gandhi, Aurobindo Ghosh, Mohd. Iqbal, V.D. Savarkar.

UNIT - IV

~~M.K. Gandhi~~, Subhash Chandra Bose, J.L. Nehru, B.R. Ambedkar.

UNIT - V

M.N. Roy, Acharya Narendra Dev, Dr. Ram Manohar Lohia, Jay Prakash Narayan

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M.A Semester IV

Core Subject paper II

International Politics - II

UNIT - I

India's Foreign Policy - Its Origin, Continuity & Emerging Economic power Structure in 21st Century, India and his Neighbours, India's Foreign Economic Policy (Make in India) & (Atmanirbhar Bharat)

UNIT - II

Past Cold War issues and Concerns; Democracy, Human Rights, Environmental issues, Contemporary debate on Development, Arms Race & Nuclear Disarmament.

UNIT - III

Third World and Its Problems, the emergence of Unipolar world; The New World Order and its major dimensions, "QUAD", "Abraham Accords", Objectives, principles and Impact.

UNIT - IV

Crises - Israeli - Arab Conflicts, Gulf War, Afghanistan Crisis, Russia - Ukraine War, Covid-19, Sri Lankan Economic Crisis

UNIT - V

Issues - North - South Dialogue, South - South Cooperation, Humanitarian Interventions, Coactions, Expansion of Democracies.

M.A Semester IV

Seventh Elective Paper IIIrd

State Politics In India (with special Reference to U.P.)

UNIT - I

State Politics: Theoretical Framework, Nature & Patterns, Emerging Trends - Demand for State Autonomy

UNIT - II Government Machinery in the States: State Executive: Governor, Chief Minister, Council of Ministers, State Legislature: Composition, power and Functions, State Judiciary: Composition Power and Functions.

UNIT - III

Changing Patterns of Centre - State Relation, Democratic Decentralisation and Social Justice, Rise of Regional Parties.

UNIT IV

Politics of U.P.: Historical Legacies, Geographic & Demographic Profile of U.P. Pressure Groups and their impact on U.P. Politics, Major Political Parties in U.P., Voting Behaviours in U.P.

UNIT V

Cast, Religion, Minorities, Schedule Caste & other Backward classes in U.P. Politics, Political Leadership and changing pattern of Dominance, Impact of National Politics on U.P. Politics.

M.A Semester IV

Seventh Elective paper III

Local Self Government.

UNIT-I

Evolution of Local Self Govt. in Pre-Independence Period; Local Self Government and the Indian Political Process since Independence, The 73rd & 74th Amendments of Constitution.

UNIT-II

Rural and Urban Local Self Government; Composition & Power, Emerging Patterns of Leadership.

UNIT-III

Finances of Local Government, Personnel Administration of Local Government.

UNIT-IV

Reservations in the Organization of Local Self Government, Local Autonomy.

UNIT-V

Social, Economic and Political Growth of Panchayati Raj, Local Self Government and Bureaucracy, Local Self Government and Politics.

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Political Sociology

UNIT-I

Definition and Growth of Political Sociology, Social bases of Politics, Relationship with Sociology & Political Science.

UNIT-II

Models for the Study of Political Behaviour, Approaches to the study of Political Sociology - Normative Approach and System Approach.

UNIT-III

Polity and Social Structure - Polity as a social - Sub-System, The Concepts of Class and elites, Ideology and Interests, Nature of Authority in Society: Traditional & Modern, Bureaucracy, charismatic Authority.

UNIT-IV Social Groups, Social Stratification and Social mobility, Interest groups and voluntary Associations, Socialization and Social Control - Modes of Primary Socialization and their relevance to Politics, Social Control and Political Power.

UNIT-V Public Opinion and Propaganda, voting Behaviour, Role of socio-Economic and socio-ethical factors, The Social basis of Indian Political Behaviour, Community, Language, Caste, Religion and Provincialism, Traditional Norms, Democratic, Egalitarian and Secular values, Sanskritization, westernization and Secularisation.

Research Project

Dissertation

- 1) The Students offering this paper will be Required to Write a Dissertation of about 40 to 60 Handwritten Pages on a topic and under a Supervisor approved by the Head of the Department of Political-Science at the College Concerned.
- 2) The Students will be Required to Submit their Dissertation to the University before the Commencement of the Examination in Theory Papers.

