



श्री लाल बहादुर शास्त्री डिग्री कालेज, गोण्डा



दिनांक: अप्रैल 12, 2024

## निविदा सूचना

दिनांक: 06 अप्रैल, 2024 को प्रकाशित निविदा में प्रायोगिक विभागों की सामग्रियों की सूची संलग्न है।

| S.No. | Item Type  | Required Brand                  |
|-------|------------|---------------------------------|
| 1     | Chemical   | Qualigens/SD Fine/Ranchem       |
| 2     | Glasswares | Borocil/Dualigens               |
| 3     | Apparatus  | ISI Marked reputed manufactures |

  
प्राचार्य

# LABORATORY INSTRUMENT FOR AGRICULTURE FACULTY

## SHRI LAL BAHADUR SHASTRI DEGREE COLLEGE, GONDA

### 1. I. AGRONOMY+(AGROFORESTRY)+AGROMETEOROLOGY

| S.N.                       | ITEM                          | QUANTITY |
|----------------------------|-------------------------------|----------|
| 1                          | Moisture box                  | 10       |
| 2                          | Moisture meter                | 01       |
| 3                          | Tube Auger                    | 02       |
| 4                          | Seed Germinator               | 01       |
| 5                          | Chlorophyll Meter (APAD 500)  | 01       |
| 6                          | Sprayer                       | 01       |
| 7                          | Mechanical Shaker             | 01       |
| 8                          | Lux meter                     | 01       |
| 9                          | Tape Meter (50 meter)         | 02       |
| 10                         | Meter Scale                   | 10       |
| 11                         | Germination Tray (40 cavity)  | 50       |
| 12                         | Germination Tray (104 cavity) | 200      |
| 13                         | Glass Bottle (1 L)            | 100      |
| 14                         | NPK Analyzer                  | 01       |
| <b>II. AGROMETEOROLOGY</b> |                               |          |
| 15                         | Cup Anemometer                | 01       |
| 16                         | Wind Vane                     | 01       |
| 17                         | Pan Evaporimeter              | 01       |
| 18                         | Lux meter                     | 01       |
| 19                         | GPS                           | 01       |
| 20                         | Sunshine recorder             | 01       |
|                            |                               |          |

### 2.AGRICULTURE EXTENSION & COMMUNICATION + (SOCIOLOGY AND PSYCHOLOGY

| S.N. | ITEMS         | QUANTITY |
|------|---------------|----------|
| 1    | LCD projector | 01       |
| 2    | Camera        | 01       |
| 3    | Radio Philips | 01       |
| 4    | T.V (52)      |          |

DM

### 3. ENTOMOLOGY

| S.N. | ITEMS                         | QUANTITY |
|------|-------------------------------|----------|
| 1    | Insect collection Box         | 10       |
| 2    | Bee Keeping Equipment box     | 02       |
| 3    | Bee Keeping (Body Shoot)      | 02       |
| 3    | Light Traps                   | 04       |
| 4    | Pheromone traps               | 04       |
| 5    | Insect Collection Bottles/Jar | 20       |
| 6    | Fumigation Chamber Machine    | 01       |
| 3    | Light Traps                   | 04       |

### 4. GENETICS&PLANTBREEDING+ (SEEDSCIENCE&TECHNOLOGY)

#### i. GENETICS

| S.N. | ITEMS                         | QUANTITY |
|------|-------------------------------|----------|
| 1    | Electronic Moisture Meter     | 01       |
| 2    | Electronic Balance            | 01       |
| 3    | Seed Germinator               | 01       |
| 4    | Automatic seed/grain counter  | 01       |
| 5    | Seed Box                      | 10       |
| 6    | Germination Tray (40 cavity)  | 50       |
| 7    | Germination Tray (104 cavity) | 200      |
| 8    | Chlorophyll Meter (APAD 500)  | 01       |
| 9    | Seed Germinator Rac           | 01       |

#### ii. BIOTECHNOLOGY+ CROP PHYSIOLOGY

| S.N. | ITEMS                 | QUANTITY |
|------|-----------------------|----------|
| 1    | BOD Incubator         | 01       |
| 2    | Centrifuge            | 01       |
| 3    | Growth Chamber        | 01       |
| 4    | Distillation Assembly | 01       |

200

**5. HORTICULTURE+(FRUIT & VEGETABLE SCIENCE)+POST HARVEST TECH.**

| S.N. | ITEMS                          | QUANTITY |
|------|--------------------------------|----------|
| 1.   | Hand Refractometer             | 01       |
| 2.   | Digital Refractometer          | 01       |
| 3.   | Oven                           | 01       |
| 4.   | Refrigerator                   | 01       |
| 5.   | Fruit crusher                  | 01       |
| 6.   | Grinding and Mixing Machine    | 01       |
| 7.   | Pestil mortar                  | 01       |
| 8.   | Plastic Crown Electric machine | 01       |
| 9.   | Gry pin                        | 02       |
| 10.  | Silver Deg (20 Liter)          | 02       |
| 11.  | Steel Balti                    | 02       |
| 12.  | Spatachuala Long iron          | 02       |
| 13.  | Spatachuala Long steel         | 05       |
| 14.  | Karchhul Steel                 | 05       |
| 15.  | Tray                           | 05       |
| 16.  | Shive (Chhanni)                | 02       |
| 17.  | Steel Knife                    | 10       |
| 18.  | Bottle Keep                    | 10       |
| 19.  | Chammach ( 5 darjan)           | 60       |
| 20.  | Glass Bottle/Jar               | 10       |

**6. SOIL SCIENCE & AGRICULTURAL CHEMISTRY**

| S.N. | ITEMS                                            | QUANTITY |
|------|--------------------------------------------------|----------|
| 1.   | Electronic Toppan balance<br>(0.1-1 mg capacity) | 01       |
| 2.   | Laminar Air Flow                                 | 01       |
| 3.   | Digestion block                                  | 01       |
| 4.   | Rotary Shaker                                    | 01       |
| 5.   | NPK Analyzer                                     | 01       |

## 7. PLANTPATHOLOGY

| S.N. | ITEMS                            | QUANTITY |
|------|----------------------------------|----------|
| 1.   | Deep freez                       | 01       |
| 2    | Wet preservation Jars            |          |
| 3    | Camera Lucida                    |          |
| 4    | Glass Jar Insect Bottle (500 ml) | 20       |
| 5    | Jar (1 L)                        | 10       |

## 8. ANIMAL HUSBANDRY & DAIRY SCIENCE+ FOOD PROCESSING

| S.N. | ITEMS                                | QUANTITY |
|------|--------------------------------------|----------|
| 1.   | Refrigerator                         | 01       |
| 2.   | Measuring Cylinder (500 ml, 1000 ml) | 02       |
| 3.   | Lactometer                           | 4        |
| 4.   | Gas Cylinder                         | 02       |
| 5.   | Milking Bucket                       | 02       |
| 6.   | Iron kadahi                          | 02       |
| 7.   | Bhagana Small                        | 02       |
| 8.   | Milking cane 10 L                    | 02       |
| 9.   | Tray                                 | 05       |
| 10.  | Sieve (Chhanni)                      | 04       |
| 11   | Keep Large & small                   | 04       |
| 12   | Steel Jug                            | 05       |
| 13   | Karchull                             | 05       |
| 14   | Chammach (5 Darjan)                  | 60       |

20M-



**Physics Department**

| S. No. | Apparatus/Instrument Name                                                | Make | Quantity |
|--------|--------------------------------------------------------------------------|------|----------|
| 1      | GM Counter                                                               |      | 01Pcs    |
| 2      | To Study E/M by Zeeman Effect                                            |      | 01Pcs    |
| 3      | Cathode Ray Oscilloscope (Hameg)                                         |      | 01Pcs    |
| 4      | Study of Reflex Klystron                                                 |      | 01Pc     |
| 5      | Study of electron spin resonance in crystal & determination of G- Factor |      | 01Pcs    |
| 6      | Determination of E/M by Millikan Oil Drop Method                         |      | 05Pc     |

*DM*

### Chemistry Department

| S. No. | Instrument Name                   | Make | Quantity |
|--------|-----------------------------------|------|----------|
| 1      | Muffle Furnace                    |      | 01Pcs    |
| 2      | UV Chamber                        |      | 01Pcs    |
| 3      | IKA Magnetive Stirrer & Hot Plate |      | 01Pcs    |
| 4      | Centrifuge Machine                |      | 01Pc     |
| 5      | Ultrasonic Sonicator              |      | 01Pcs    |
| 6      | Autoclave                         |      | 01Pcs    |



### Zoology Department

| S. No. | Instrument Name                                    | Make | Quantity   |
|--------|----------------------------------------------------|------|------------|
| 1      | Sahli's haemoglobinometer                          |      | 04 pcs     |
| 2      | Haemocytometer                                     |      | 04 pcs     |
| 3      | Sphygmomanometer                                   |      | 02 pcs     |
| 4      | Glucometer                                         |      | 02 pcs     |
| 5      | Chromatography jar (Glass)                         |      | 04 pcs     |
| 6      | Deep freezer (BlueStar 95 litres)                  |      | 01 pcs     |
| 7      | UV chamber                                         |      | 01 pcs     |
| 8      | Laminar hood flow                                  |      | 01 pcs     |
| 9      | <b>Electrophoresis equipment.</b>                  |      |            |
| A      | Agarose gel                                        |      |            |
| B      | Polyacrylamide gel                                 |      |            |
| 10     | Centrifuge (6000 rpm)                              |      | 01 pcs     |
| 11     | <b>Basic equipment needed in wildlife studies-</b> |      |            |
| A      | Compass                                            |      | 05 pcs     |
| B      | Binoculars                                         |      | 02 pcs     |
| C      | Spotting scope                                     |      | 01 pcs     |
| D      | Range finders                                      |      | 01 pcs     |
| E      | Global positioning system                          |      | 01 pcs     |
| 12     | Thermocycler (PCR Machine)                         |      | 01 pcs     |
| 13     | Wildlife Camera                                    |      | 01 pcs     |
| 14     | <b>List of Chemicals</b>                           |      |            |
| A      | Restriction enzyme digestion teaching kit          |      | 05 pcs     |
| B      | PCR -Teaching kits                                 |      | 05 pcs     |
| C      | DNA extraction kit                                 |      | 01 pcs     |
| D      | SDS                                                |      | 250 gm     |
| E      | Buffer (EDTA Tris acetate)                         |      | 100 gm     |
| F      | ETBR                                               |      | 10 gm      |
| G      | Agar                                               |      | 01 Kg      |
| H      | Culture plates                                     |      | 100 pcs    |
| I      | Yeast extract                                      |      | 01 Kg      |
| J      | KOH pellets                                        |      | 250 gm     |
| K      | Slides <i>Bluestar</i>                             |      | 10 pkt     |
| L      | Acetone                                            |      | 250 ml * 2 |
| M      | Isopropyl alcohol                                  |      | 5 Lt.      |
| N      | Medical Gloves                                     |      | 20 pcs     |
| O      | Large Gloves                                       |      | 4 Sets     |
| P      | Anti Serum A & B                                   |      | 4 pkt      |

*20/11*



## Botany Department

|            | Name of Article                            | Make                              | Quantity  |
|------------|--------------------------------------------|-----------------------------------|-----------|
| <b>(A)</b> | <b><u>EQUIPMENTS</u></b>                   |                                   |           |
| 1          | Monocular Compound Microscope              | Wes Wox HL-4a                     | 38Pcs     |
| 2          | Dissecting Microscope                      | Wes Wox DM-2                      | 38Pcs     |
| 3          | Binocular Compound Microscope              | Wes Wox BXL                       | 01Pcs     |
| 4          | Research Microscope                        | Wes Wox BXL -TR                   | 01Pc      |
| 5          | Hot Air Oven                               | sesw 28 L-                        | 01Pcs     |
| 6          | Burret Stand Steel Body/Plastic Body       | Pasco stand 8x5                   | 05Pc      |
| 7          | Mental Cavity Heater                       | Rawal's                           | 01Pc      |
| 8          | Lux Meter                                  |                                   | 01 pc     |
| 9          | Staining Rack Water Proof Ply Sunmica Top  | Double Row for 12 Staining Bottle | 40Pcs     |
| 10         | Arc - auxanometer                          |                                   | 01pc      |
| 11         | Quadrate Size 1X1 Meter                    | steel body /wood body             | 10pc      |
| 12         | Wilmott's Bubbler                          |                                   | 01pc      |
| 13         | Klinostate plant growth Instrument         |                                   | 01Pc      |
| 14         | Vertical Autoclave Capisity 15 Litre       | steel body                        | 01Pc      |
| <b>(B)</b> | <b><u>CHEMICALS</u></b>                    |                                   |           |
| 1          | Safranin Powder                            | sd.fine                           | 50gm      |
| 2          | <u>Fast Green</u>                          | sd.fine                           | 50gm      |
| 3          | Carmine                                    | sd. fine                          | 25gm      |
| 4          | Cotton Blue                                | sd.fine                           | 02Litre   |
| 5          | Alpha Nephthol                             | Qualigens                         | 500ml     |
| 6          | Diethyl Ether                              | Qualigens                         | 500ml     |
| 7          | Tetrazolium Salt                           | sd.fine                           | 10gm      |
| 8          | Indole Acetic Acid                         | Qualigens                         | Min. Pack |
| 9          | Citric Acid                                | Qualigens                         | Min. Pack |
| 10         | Tarteric Acid                              | Qualigens                         | Min. Pack |
| 11         | Oxalic Acid                                | Qualigens                         | Min. Pack |
| 12         | Malic Acid                                 | Qualigens                         | Min. Pack |
| 13         | Sodium Alginate                            | Qualigens                         | Min. Pack |
| 14         | Agar Agar                                  | Qualigens                         | 500gm     |
| 15         | n Butanol                                  | Qualigens                         | 1000ml    |
| 16         | Ninhydrin Sparey Agent                     | Qualigens                         | 10gm      |
| 17         | Phenol                                     | Qualigens                         | 500gm     |
| 18         | Colchicine                                 | Qualigens                         | Smal pack |
| <b>(C)</b> | <b><u>MISCELLANEOUS ITEMS</u></b>          |                                   |           |
| 1          | Crucible                                   | Borosil                           | 30Pcs     |
| 2          | <u>Chromatography Paper</u>                | Whatman No.1                      | 50Sheet   |
| 3          | Pestal Mortor                              |                                   | 02Pcs     |
| 4          | Plastic Measuring Cylinder Capacity -500ml |                                   | 02Pcs     |
| <b>(D)</b> | <b><u>GLASSWARES</u></b>                   |                                   |           |
| 1          | Plain Slide                                | Blue Star                         | 100Pkt    |
| 2          | <u>Cover Slip Round Shape 18mm</u>         | Blue Star                         | 150Pkt    |
| 3          | Capillary Tube                             |                                   | 100pc     |

*SM*

|            |                                      |         |         |
|------------|--------------------------------------|---------|---------|
| 4          | Petridish Diameter 10cm              | Borosil | 20Pcs   |
| 5          | Collection Bottle Capacity 250ml     | Borosil | 20Pcs   |
| <b>(E)</b> | <b>PERMANENT SLIDES</b>              |         |         |
| 1          | Volvox                               |         | 01Pc    |
| 2          | Chara Sexual Part                    |         | 01Pc    |
| 3          | Rhynia T.S.                          |         | 01Pc    |
| 4          | Psilotum L.S.Sporangium              |         | 01Pc    |
| 5          | Psilotum T.S. Synangium              |         | 01Pc    |
| 6          | Calamites T.S. Sporophyll fossil     |         | 01Pc    |
| 7          | Welwitschia T.S. Stem                |         | 01Pc    |
| 8          | Welwitschia t.S. Leaf                |         | 01Pc    |
| 9          | Picea T.S. Stem                      |         | 01Pc    |
| 10         | Cryptomaria T.S. Leaf                |         | 01Pc    |
| 11         | Cryptomaria L.S. Strobilus           |         | 01Pc    |
| 12         | Taxodium t.S. Leaf                   |         | 01Pc    |
| 13         | Podocarpus T.S. Stem                 |         | 01Pc    |
| 14         | Podocarpus T.s. Leaf                 |         | 01Pc    |
| 15         | Agathis T.S. Leaf                    |         | 01Pc    |
| 16         | Gloeotrichia WM                      |         | 01Pc    |
| 17         | Fucus Airbladder                     |         | 01Pc    |
| 18         | Pogonatum Peristomal Teeth           |         | 01Pc    |
| 19         | Funaria Peristomal Teeth             |         | 01Pc    |
| 20         | Sphaerocarpus thallus                |         | 01Pc    |
| 21         | Sphaerocarpus Sporophyte             |         | 01Pc    |
| 22         | Sphaerocarpus Sex Organ              |         | 01Pc    |
| 23         | Plagiochasma v.T.S Thallus           |         | 01Pc    |
| 24         | Lunularia V.T.S Thallus              |         | 01Pc    |
| 25         | Asterella V.T.S. Thallus             |         | 01Pc    |
| 26         | Monoclea V.T.S Thallus               |         | 01Pc    |
| 27         | Plasmodiophora                       |         | 01Pc    |
| 28         | Achlya                               |         | 01Pc    |
| 29         | Erisiphe                             |         | 01Pc    |
| 30         | Phllactenia                          |         | 01Pc    |
| 31         | Claviceps                            |         | 01Pc    |
| 32         | Pleospora                            |         | 01Pc    |
| 33         | Morchella L.S. Fruiting              |         | 01Pc    |
| 34         | Urocystis                            |         | 01Pc    |
| 35         | Melampsora Lini                      |         | 01Pc    |
| 36         | Ravenelia                            |         | 01Pc    |
| 37         | Colletotrichum                       |         | 01Pc    |
| 38         | Lichen Thallus Heteromerous T.S.     |         | 01Pc    |
| 39         | Bacteria (Streptococcus)             |         | 01Pc    |
| 40         | Lichen Cladonia thallus T.S.         |         | 01Pc    |
| <b>(F)</b> | <b>BOTANICAL CLASSWORK MATERIALS</b> |         |         |
| 1          | Volvox                               |         | 20 Unit |
| 2          | Oedogonium                           |         | 20 Unit |

2011



|    |                                     |         |
|----|-------------------------------------|---------|
| 3  | Polysiphonia                        | 20 Unit |
| 4  | Peziza Apothecia                    | 20 Unit |
| 5  | Curvularia                          | 20 Unit |
| 6  | Puccinia Uredospore on Wheat leaf   | 20 Unit |
| 7  | Puccinia Teleutospore on Wheat Stem | 20 Unit |
| 8  | Late Blight of Potato               | 20 Unit |
| 9  | Marchantia Thallus with Gemma Cup   | 20 Unit |
| 10 | Sphagnum W.M.                       | 20 Unit |
| 11 | Lycopodium Stem                     | 20 Unit |
| 12 | Lycopodium Cone                     | 20 Unit |
| 13 | Equisetum Stem                      | 20 Unit |
| 14 | Equisetum Cone                      | 20 Unit |
| 15 | Ephedra Stem                        | 20 Unit |
| 16 | Saprolegnia                         | 05 Unit |
| 17 | Peronospora                         | 05 Unit |
| 18 | Pilobolus                           | 05 Unit |
| 19 | Erysiphae                           | 05 Unit |
| 20 | Morchella                           | 05 Unit |
| 21 | Urocystis                           | 05 Unit |
| 22 | Melampsora                          | 05 Unit |
| 23 | Cercospora                          | 05 Unit |
| 24 | Powdery Mildew of Pea               | 05 Unit |
| 25 | Downy Mildew                        | 05 Unit |
| 26 | Padina                              | 05 Unit |
| 27 | Dictyota                            | 05 Unit |
| 28 | Fucus                               | 05 Unit |
| 29 | Batrachospermum                     | 05 Unit |
| 30 | Cythodium                           | 05 Unit |
| 31 | Plagiochasma                        | 05 Unit |
| 32 | Lunularia                           | 05 Unit |
| 33 | Asterella                           | 05 Unit |
| 34 | Pellia Thallus                      | 05 Unit |
| 35 | Porella                             | 05 Unit |
| 36 | Takakia                             | 05 Unit |
| 37 | Notothylas                          | 05 Unit |
| 38 | Andreaea                            | 05 Unit |
| 39 | Buxbaumia                           | 05 Unit |
| 40 | Selaginella                         | 05 Unit |
| 41 | Isoetes                             | 05 Unit |
| 42 | Angiopteris                         | 05 Unit |
| 43 | Ophioglossum                        | 05 Unit |
| 44 | Adiantum                            | 05 Unit |
| 45 | Taxus                               | 05 Unit |
| 46 | Gnetum                              | 05 Unit |
| 47 | Leptadenia Stem                     | 05Unit  |
| 48 | Salvadora Stem                      | 05 Unit |