**BOTANY**

**Faculty Member:**

1. Prof. Karnewar Shrikant Dharamraj

2. Prof. Burungle Sameer V.

3. Prof. Gharge Punam V.

**BOTANY LAB DETAILS**

**Equipments**

|  |  |  |
| --- | --- | --- |
| **Sr no**  | **Particular** | **Quantity**  |
| 1 | Compound Microscope | 09 |
| 2 | Quadrats | 01 |
| 3 | Physical purity work board | 01 |
| 4 | Seed divider | 01 |
| 5 | Seed sampling trier | 01 |
| 6 | Bio visual charts  | 36 |
| 7 | Hot air oven | 01 |
| 8 | Weighing balance | 02 |
| 9 | Isolation chamber | 01 |
| 10 | Visible Spectrophotometer | 01 |
| 11 | Stage micrometer slides | 04 |
| 12 | Ocular micrometer slides | 04 |
| 13 | Farmer’s potometer | 04 |
| 14 | Ganong’s Respirometer | 05 |
| 15 | Planimeter | 02 |
| 16 | Leaf Area Meter | 01 |
| 17 | Arc Auxanometer | 04 |
| 18 | Rutterner water sampler | 01 |

**Chemicals:**

|  |  |  |
| --- | --- | --- |
| **Sr no**  | **Particular** | **Quantity**  |
|  | Acetone | 500 ml |
|  | Agar agar powder  | 500 gm |
|  | Ammonia solution | 500 ml |
|  | Ammonium chloride | 500 gm |
|  | Barium hydroxide | 500 gm |
|  | Boric acid  | 500 gm |
|  | Bromophenol blue  | 125 ml |
|  | Calcium carbonate  | 250 gm |
|  | Calcium chloride | 500 gm |
|  | Calcium hydroxide | 500 gm |
|  | Calcium sulphate | 500 gm |
|  | Cobalt chloride | 100gm |
|  | Dimethyl sulfoxide | 500 ml |
|  | Eosine yellow | 25 gm |
|  | Erichrome Back T indicator | 25 gm |
|  | Ethereal  | 100 ml |
|  | Ferric chloride  | 500 gm |
|  | Ferrous sulfate  | 250 gm |
|  | Gibberlic acid | 1gm |
|  | Glycine  | 100 gm |
|  | Hydrochloric acid  | 500 ml |
|  | IBA  | 10 gm |
|  | Indol Acetic Acid | 5 gm |
|  | Indole acetic acid | 5 gm |
|  | Kaoline | 500 gm |
|  | Magnesium chloride  | 500 gm |
|  | Magnesium sulphate | 500 gm |
|  | Malic hydrazide | 100 gm |
|  | Mercury pure | 250 ml |
|  | Methanol  | 500 ml |
|  | Methanol  | 500 ml |
|  | Metholic KOH | 500 ml |
|  | Methylene blue | 125 ml |
|  | NaCL | 500 gm |
|  | NaOH pellets | 500 gm |
|  | Nicotinic acid  | 25 gm |
|  | Petrolium ether  | 500 ml |
|  | Phenol cryst | 500 gm |
|  | Phenolapthalin indictor  | 125 ml |
|  | Phenyl mercuric acetate | 100 gm |
|  | Polyethylene glycol | 500 ml |
|  | Potassium Dichromate  | 500 gm |
|  | Potassium dihydrogen orthophosphate | 500 gm |
|  | Potassium hydroxide | 500 gm |
|  | Potassium Iodide | 250 gm |
|  | Potassium Nitrate  | 500 gm |
|  | Potassium nitrate  | 500 gm |
|  | Pydridoxin HCL  | 10 gm |
|  | Pyrogallol | 100 gm |
|  | Sodium chloride | 500 gm |
|  | Sodium Hydroxide | 500 gm |
|  | Sodium molybdeate | 100 gm |
|  | Sodium phosphate | 500 gm |
|  | Sodium thiosulfate  | 500 gm |
|  | Starch  | 500 gm |
|  | Starch potato | 500 gm |
|  | Sucrose | 500 gm |
|  | Sucrose extra pure | 500 gm |
|  | Sulphuric acid  | 1000 ml |
|  | Tetrozolium salt  | 10 gm |
|  | Transformation kit | 01 |
|  | Zinc Sulfate  | 500 gm |

**Glass wares and others**

|  |  |  |
| --- | --- | --- |
| Sr no | Particular  | **Quantity**  |
| 1 | Burrette (25 ml) | 03 |
| 2 | Conical flask | 04 |
| 3 | Thread  | 01 |
| 4 | Labels  | 100 |
| 5 | Seed sample | 06 crops (5 kg each) |
| 6 | Seed storage bags | 02 |
| 7 | Volumetric flask1. 10 ml
2. 25 ml
3. 100 ml
 | 060602 |
| 8 | Hand sprayer | 01 |
| 9 | Forceps | 01 |
| 9 | Syringe filter | 01 |
| 10 | Spirit lamp | 01 |
| 11 | Magnifying lens | 02 |
| 12 | a)Beaker (50 ml) | 20 |
|  | b) Beaker(100 ml) | 15 |
|  | c) Beaker (250 ml) | 15 |
| 13 | Test tubes | 12 |
| 14 | Petri plates | 15 |
| 15 | Conical flask with side spout | 06 |
| 16 | Scissor | 01 |
| 17 | Scalpel | 01 |
| 18 | Spatula | 02 |
| 19 | Measuring cylinder (50ml, 100ml, 250ml, 1000 ml) | 06 |
| 20 | Pipette | 03 |
| 21 | Slides | 50 |
| 22 | Filter paper | 01 box |
| 23 | Thermometer | 04 |
| 24 | Reagent bottle | 05 |
| 25 | Test tube stand | 03 |
| 26 | Mounting paper | 10 |
| 27 | Cell division slides of mitosis and meiosis | 12 |
| 28 | Towel paper | 02 box  |
| 29 | Burette Stand | 06 |
| 30 | BOD bottle | 06 |
| 31 | Pinch cock | 06 |
| 32 | Desiccators  | 01 |

**Different Practical oriented and allied activities**

 

 Seminars

Flipped classroom activity

 

Role play

Field visit at Amar seeds pvt. Ltd. Phaltan