

Department-wise infrastructure and facilities

Department wise list of Major Equipment's in the Laboratories

DEPARTMENT OF FRUIT SCIENCE		
Sl.No.	Particulars	Quantity
1.	Clevenger apparatus	01
2.	Weighing balance (1gm to 300gms)	01
3.	Weighing balance (1 to 5 kgs)	01
4.	Soxhlet extraction operators	01
5.	Penetrometer	01
6.	Heating mantle	01
7.	Water distillation unit	01
8.	Micro wave oven	01
9.	Micropipette (Capacity 2-20 µl)	01
10.	Micropipette (Capacity 20-200 µl)	01
11.	Micropipette (Capacity 100-1000 µl)	01
12.	P ^H Meter	01
DEPARTMENT OF VEGETABLE SCIENCE		
Sl. No.	Particulars	Quantity
1.	Monocular microscope	04
DEPARTMENT OF FLORICULTURE AND LANDSCAPING		
Sl.No.	Particulars	Quantity
1.	Secateurs	28
2.	Safety knife	10
3.	Hedge shears	03
4.	Asspee Knapsack sprayer (16 L)	01
5.	Aditya sprayer (5 L)	01
6.	Pruning saw	01
7.	Garden rake 12 teeth with hand	01
8.	Garden hoe	02
9.	Weeding traveller	01
10.	Hand cultivator	04
11.	Hand saw	01
12.	Garden shears	01
13.	Bill hook	08
14.	Digital weighing scale (20 kg capacity)	01
15.	Sprayer	01
16.	Digital Vernier caliper	01
17.	Trowel	02
18.	Shovel	02
19.	Hand fork	12

20.	Hand Cultivator	02
21.	Scythe	01
22.	Grafting knife	10
23.	Pruning secateurs (big)	22
24.	Rose can (10 L)	25
DEPARTMENT OF PLANTATION, SPICES, MEDICINAL AND AROMATIC CROPS		
Sl. No.	Particulars	Quantity
1.	Clevenger apparatus	01
2.	Double Distillation unit	01
DEPARTMENT OF POSTHARVEST MANAGEMENT		
Sl. No.	Particulars	Quantity
1.	Kenstar mixer	01
2.	Micro wave oven	01
3.	Digital verniercalipers (150 mm and 300 mm)	02
4.	Digital Refractometer (Brix- 0 to 85%)	01
5.	Pen type pH meter	01
6.	Vertical Autoclave	01
7.	EZIDRI model-Drier	01
8.	Penetrometer	01
10.	Clevenger Apparatus	01
11.	Electronic Balance	01
12.	Vaccum packing machine	01
13.	Microwave oven	01
14.	Crown Corking machine	01
15.	Vegetable cutting machine	01
16.	Carrot juicer machine	01
17.	Pulverize machine	01
18.	Hand dryer	01
19.	Sealing machine	01
20.	Mixer Grinder	01
21.	Weighing balance (Capacity 300 kg)	01
22.	Kenstar food Processor	01
23.	Visi cooler	01
DEPARTMENT OF PLANT PROTECTION		
PLANT PATHOLOGY		
Sl.No.	Particulars	Quantity
1.	Vertical Laminar Air Flow Chamber	2
2.	Plant press	2
3.	Aspirator	2
4.	Rakermounts (10 x12, 12 x15,12 x18)	2
5.	Monocular Microscope	28
6.	Electronic balance (0.01g to 500g) (SF-400C)	1
7.	Semi Automatic Autoclave Model SA-52	4

8.	Hot air oven	2
9.	BOD incubator	1
10.	Petri plates	987
11.	Micropipette	1 set
12.	Test Tube (27 mm)	2500
13.	Test tube stand	1 pcs
14.	Culture tube	2 pcs
15.	Conical flask (250 ml)	50
16.	Conical flask (500 ml)	40
17.	Conical flask (1000 ml)	40
18.	Conical flask (5000 ml)	30
19.	Induction stove	1
20.	Micro oven	1
21.	Specimen Jar (12' x 14'' round)	72
22.	Deep freezer (500 L)	1
23.	BOD Incubator	1
24.	Binocular stereo zoom microscope	2
25.	Trinocular Research microscope with Sony Camera with accessories	1
26.	Sony Video Camera and Accessories	1
27.	Orbital shaker	1
28.	HTP sprayer	1
29.	Battery Operated Manual Sprayer	4
30.	Refrigerator	2
ENTOMOLOGY		
Sl. No.	Particulars	Quantity
1.	Insect cabinet box	150
2.	Insect mounting board	100
3.	Insect collection nets	100
4.	Insect setting block	100
5.	Rearing cages	25
6.	Insect showcase cabinet 24 drawers	01
7.	Aspirators	27
8.	Honeybee box	20
9.	Honeybee box stand	20
10.	Honey Extractor	01
11.	Pollen Extractor	01
12.	Knap-sack sprayer	01
13.	Petrol Operated Power Sprayer	01
14.	Insect Dissection Box	12
15.	Stereo-binocular Microscope	01
16.	Trinocular Stereo Zoom Microscope	01
17.	Micro photography system camera with adopter compatible	01
18.	Insect light trap with electric bulb	01
19.	Insect Light trap with 10-watt fluorescent tube	01

20.	Samsung Refrigerator	01
21.	Solar powered artificially intelligent pest control device	01
DEPARTMENT OF BASIC SCIENCE		
Sl.No.	Particulars	Quantity
1.	Binocular Microscope	02
2.	Laminar Air Flow	02
3.	Monocular microscopes	20
4.	Sensitive Balance	01
5.	Orbital Shaker	01
6.	PCR machine	02
7.	Gel Documentation Unit	01
8.	Spectrophotometer	02
9.	pH meter	02
10.	Ice flake machine	01
11.	Ultra pure water system	02
12.	Horizontal Gel Electrophoresis	01
13.	Vertical Gel Electrophoresis	01
14.	Tissue culture racks	04
15.	Vertical Freezer	01
16.	Refrigerator	01
17.	Distillation unit	01
18.	Hot Air oven	01
19.	Conductivity meter	01
20.	Autoclave	03
21.	Digital Scale (35 Kg Max.)	01
22.	Water Bath	01
23.	Digital Leaf area meter	01
24.	Digital Hot air oven	01
25.	IR thermometer	01
26.	Deep freezer	01
27.	Plastic Petri plates	30
28.	Test tube stands	08
29.	Test tubes (18 x150 mm) (25 x 150 mm)	100 100
DEPARTMENT OF NATURAL RESOURCE MANAGEMENT		
	AGRONOMY	
Sl. No.	Particulars	Quantity
1.	Tensiometer	03
2.	Soil water potential sensor	01
3.	Electronic top loading balance (Capacity 10 kg)	01
4.	Electronic top loading balance (Capacity 1gm)	01
5.	Electronic digital hanging balance	01
6.	Soil moisture and water potential meter	01
7.	Digital Moisture meter	01
8.	Seed counter machine with stabilizer	01

9.	Circular Orifice	01
10.	Lux meter	01
	SOIL SCIENCE AND AGRICULTURAL CHEMISTRY	
1.	Microcontroller based pH meter	01
2.	Microcontroller based conductivity meter	01
3.	Microcontroller based flame photo meter	01
4.	Spectrophotometer	01
5.	Hot air oven (18"x18"x18")	01
6.	Electronic balance (0.01 g)	01
7.	Hot plate	02
8.	Phycometer	02
9.	Distillation unit double built (1.5 ltr)	03
10.	Electronic relay unit	01
11.	Water softener	01
12.	Parashall flume	01
13.	Mini Rotary shaker	01
14.	Water bath (16"x12"x 04")	01
15.	Orbital shaker	01
16.	Revolutionary high-speed centrifuge	01
17.	Hand Refractometer	01
18.	Digital scale	01
19.	Electronic balance	01
20.	Incubator shaker	01
21.	Thermometer	04
22.	Hot air oven	01
23.	Soil hydrometer	05
24.	Keens cup (brass)	25
25.	Soil core sampler	01
26.	Screw auger	01
27.	Post hole auger	01
28.	Tube auger	01
29.	Infiltration meter	01
30.	Automatic dual touch screen distillation system	01
31.	pH sensor for Hanna pH probe	01
32.	pH Electrode for Bench top pH meter	01
33.	Electronic Balance (Capacity 200gms)	01
34.	Electronic Balance (10mg -100gms)	01
35.	Centrifuge	01
36.	Instantaneous soil thermometer with pH meter	01
37.	Soil hydrometer	02
38.	Silica crucible (50 ml)	05
39.	Teflon beaker (50 ml)	03
40.	Weighing Balance	01
41.	Infusil automatic cabinet water still Distil on softener Distillation	01
42.	Conductivity meter	01

43.	pH Meter	01
44.	Spectrophotometer	01
45.	Flame Photometer	01
46.	(a) Automatic nitrogen estimation system	01
47.	UV Visible spectrophotometer	01
48.	Hot air oven	01
49.	Water bath	01
50.	Magnetic stirrer	01
51.	Hot plate	01
	AGRICULTURAL MICRO BIOLOGY	
01	Monocular microscope	03
02	Electronic weighing machine	01
03	Autoclave	01
04	Refrigerator	01
05	Microwave oven	01
06	Water bath	01
07	Incubator	01
	FORESTRY	
1.	Bio Diesel Transesterification Unit	01
2.	Calipers (Slide IME type-superior)	10
3.	Vernier Caliper (6"/150 mm)	03
4.	Tree caliper (Size 100 cm)	06
5.	Altimeter	02
6.	Increment Borer	01
	AGRICULTURAL ENGINEERING	
1.	Hand refractro meter	01
2.	Electronic compact scale	01
3.	Life line Digital Thermometer	01
4.	Refractometer	01
5.	Thermometer	02
6.	Desicator	01
7.	Deep freezer (500 ltrs)	01
8.	BOD incubator (Size 650 x 580 x 900 mm)	01
9.	Hot air oven	01
10.	Sealing machine	01
11.	Digital Refractometer (Brix 0-85%)	01
12.	Pen type pH meter	01
13.	Small millet grader with 0.5 hp three phase electrical motor	01
14.	Mango Harvester	01
15.	Metric Chain	05
16.	Cross staff	03
17.	Dumpy level with aluminum stand	02
18.	Ranging rod	08
19.	Octagonal Square (Cross staff)	02
20.	Optical Square	02

21.	Metal tape (15 mtr)	01
22.	Abney level	02
23.	Prismatic Compass	03
24.	Microwave oven	01
25.	Weighing Scale (Capacity- 50 kg)	01
26.	Electronic weighing machine (600 gm capacity)	01
27.	SS food pulverize machine	01
28.	Hot air oven	01

Farm Facilities

Details of Instructional Units with Specification

Sl. No.	Unit	Area (ha/sq m.)	Description
1	Fruit crops unit	4.0	Mango, Banana, Sapota, citrius Minor fruit crops like Ber, Bael, Custard apple, Malayan rose apple, Barbados Cherry, Jamun, Aonla, Soursop, Bilimbi, Star apple, Wood apple and Sweet Tamarind fruits collections are maintained.
2	Planatation	08.0	Coconut, Arecanut, is maintained.
3	Medicinal and Aromatic Unit	0.50	MAP's like Aloevera, Ashwaganda, Coleus, Datura, Guggal, Kalmegh, Chekurmanis, Periwinkle, Long pepper, Brahmi, Garden rue, Stevia, Basil, Clossimum, Madhunashini, Costus, Tincture plant, Sarpaganda, Adathoda, Amruthaballi, Shankhpushpi, Chitramula, Liqourice, Gulganji, Greater galangal, Pepper mint, Japanese mint, Spear mint, Bergamot mint, Geranium, Vetiver grass, Citronella grass, Lemon grass, Palmarosa, French Jasmine and Patchouli are maintained.
4	Floriculture Unit	3.50	Demonstration blocks of perennial flower crops like Rose, Crossandra, Tuberose and seasonal flowers like Marigold, Chrysanthemum, Gladiolus established for practical utility.
5	Vegetables Unit	2.0	Seasonal vegetables like Muskmelon, Cluster bean, Okra, Garden pea, Ridge guard have been cultivated for the demonstration purpose
6	Mushroom production Unit	29.64sq. m	Students are trained to undertake the Oyster mushroom cultivation using modern techniques.
7	Agro Forestry	1.00	An Agroforestry system was developed by integrating the components of timber, fodder, Fruits and grass to meet the various requirements of the farming community. Sysem with multipurpose tree species like <i>Tectona grandis</i> , <i>Madhuca latifolia</i> , <i>Feronia lemonia</i> , <i>Swietenia mahagoni</i> , <i>Calophyllum inophyllum</i> , Sandal wood, <i>Pongamia pinnata</i> , <i>Pithecellobium dulce</i> , <i>Anthocephalus kadamba</i> , etc are plant in the agroforestry block.

- All these instructional units are effectively utilized for instructional purpose which enhances the practical knowledge of the students.
- A Kitchen Garden has been raised in an area of 0.30 acres wherein all kinds of vegetables including tuber vegetables, root vegetables, green leafy vegetables, pandal type vegetables are grown seasonally.

- Flower and Vegetable Production units are in operation throughout the year in an area of 0.75 acre with variety of flowers like Marigold, Tuberose, Chrysanthemum, Celosia, Jasmine, Crossandra, Aster, Zinnia and vegetables like Okra, Cluster bean, Cucurbits etc.,
- Irrigation facilities have been provided for all instructional farms unit with drip and sprinkler system.
- A mushroom production unit has been maintained in an area of 29.64 sq. mt utilized for mushroom production and it is maintained by the students under experiential learning programme.

Details of the Nursery Unit

- The College has well established nursery with polyhouse, shade houses, mist chamber and poly tunnel facilities which are utilized to raise Mango rootstocks, Mango grafts of different varieties like Mallika, Alphonso and Banganapalli, Sapota (Cricket ball, Kalipatti, DHS-1 and DHS-2), Super Bhagwa Pomegranate air layered plants, minor fruit crops, Arecanut, Coconut, Vegetables, Medicinal and Ornamental plants.
- Students and staff of the College are making use of the facility for their course and used for student READY Programme.

Sl. No.	Unit	Numbers	Area (ha)
1.	Polyhouse	2 5	0.08 0.03
2.	Mist chamber	2	0.01
3.	Shade net	2 3 1	0.06 0.04 0.09
4.	Potting shed (established under ELP Project)	1	0.003
5.	Pomegranate Mother block	1	0.84
6.	Guava Mother block	1	0.25
7.	Fruit Crops Mother block (Established under ELP Project)	1	0.33