

Annexure

Equipments required for conducting practicals in FDP Botany (pass) Practical

Sl. No.	Name of item	Justification	Quantity
BASIC NEEDS			
1	Colorimeter	Quantification of chlorophyll	1
2	Visible Spectrophotometer	Quantification of chlorophyll/ protein/ Phenols etc	1
3	Electronic balance 3 digit	Weighing accurate quantity of general lab chemicals	1
4	Pressurre Cooker (10 L /20 L)	For sterilization of media for microbiology and tissue culture (small quantity)	1
5	Compound binocular microscopes with LED illumination	Essential for B.Sc. Cytology practicals	1
6	Compound microscope with High and low power objectives	Essential for practicals of B.Sc. all semesters	1 for each student
7	Dissection microscope	Essential for B.Sc. Taxonomy practicals	1 for each student
8	Laptop / Desktop for Bioinformatics Lab	Essential for conducting/ demonstration of Bioinformatics practicals	1
9	Refrigerator	Storing heat labile chemicals / solutions	1
10	pH meter	For measuring pH of soil, water samples, Adjusting pH of media,	1
11	Camera lucida	Draw line diagram of microscopic structues MSc and BSc	1
12	Micrometer	Measurement of microscopic objects	1
13	Horticultural tools	Demonstration of horticulture practicals	1 set mentioned in the syllabus
14	Ganong's potometer	Minor apparatuses for plant Physiology practicals	1
15	Ganong's light screen		1
16	Wilmott's bubbler		1
17	Clinostat		1
18	Arc Auxanometer		1
19	Kuhn's fermentation vessel		1
20	Ganong's respirometer		1

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Desirable equipments for demonstration of practicals			
1	Laminar air flow hood	Essential for demonstration of Microbiology and Tissue culture practicals	1
2	Platform shaker 3' X 3' (with clamps to hold 500 ml, 250 ml and 150 ml flasks)	For Demonstration of tissue culture and Microbiology experiments	1
3	Autoclave (Horizontal / Vertical)	For Demonstration of sterilization of media for microbiology and tissue culture (large quantity)	1
4	Rotary microtome	Demonstration of Cutting sections of paraffin embedded sections	1
5	Sledge microtome	Demonstratio of cutting sections of woody materials	1
6	Electrophoresis - PAGE with power pack and accessories	Demonstrating practicals of Protein electrophoresis	1
7	Electrophoresis - AGE with power pack and accessories	Demonstrating practicals of DNA electrophoresis	1
8	PCR (Gradient)	Practical/Demonstration of PCR in MSc and BSc practicals	1
9	Double Distillation unit	Essential for getting distilled water in many solution / culture medium for demonstration of experiments	1
10	Tissue Culture rack	Incubating culture vessels in controlled conditions demonstratio of tissue culture experiments	1
11	Research Microscope with camera (preferably imported)	To demonstrate photomicrography.	1
12	Electronic balance 4 digit	Weighing accurate quantity of fine chemicals for demonstrating microbiology and tissue culture experiments	1
13	Hot Air Oven	For drying of glasswares/ plastic wares / plant samples for demonstration of various experiments	1