

Total No. of Printed Pages—4

6 SEM TDC BOT G 2 PR A

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(May)

BOTANY

(General)

Course : 602

(Practical)

Full Marks : 32

Pass Marks : 13

Time : 4 hours

Instructions to Examiners

General :

1. All the specimens/materials prescribed in the syllabus, laboratory equipments and appliances, necessary chemicals, stains, glass-wares and all other requirements during practical examination must be kept ready prior to the commencement of the examination.
2. Candidates be asked to submit their practical record books, collected specimens/charts/models, etc., before commencement of the examination.

3. Plant materials and experiments should be selected by external examiner only from those mentioned in the specific instructions.
4. Answer-scripts must be evaluated by both the external and internal examiners and standard must be maintained.
5. While allotting marks for practical notebooks, quality, quantity and regularity must be maintained.

Specific :

1. Biological Chemistry :

Three biochemical tests are supplied with this instruction paper. One experiment should be allowed to each student alternately or on draw basis. Each student should be given maximum two chances.

Distribution of Marks :

Requisites	3
Procedure	4
Results	<u>3</u>
Total	10

2. Plant Ecology :

Three ecological experiments are supplied with this, number of which can be increased depending on the number of students. Each student should be allowed to select only one such experiment to be performed on draw basis. Each student should be given

maximum two chances to select the experiment which should be strictly followed.

Distribution of Marks :

Theory	2
Procedure	5
Results and inference	3
Total	<u>10</u>

3. Candidates shall have to submit either collection of endemic/endangered plant species; charts and models of phytogeographical importance. 4
4. Practical record book.

Distribution of Marks :

Quality	1
Quantity	2
Regularity	1
Total	<u>4</u>

5. Viva voce. 4

(Knowledge on the topics included in the theory papers 30300 and practical techniques be tested.)

List of Experiments :

For Question No. 1 (experiment A), to select any one of the following experiments on draw basis :

- (a) To perform qualitative test for plant protein in Pea/Gram/Arahar seed extract.

- (b) To detect the presence of *soluble carbohydrates* in sugarcane juice/potato tuber extract.
- (c) To detect the presence of *fats* in mustard seed/groundnut.

For Question No. 2 (experiment B), to select any *one* of the following experiments on draw basis :

- (a) To find out biotic components of a grassland community (preferably within or nearby college campus) and enlist the botanical name of the producers and common name of the consumers by Quadrate method (size : approx. 50 sq. meter). Also, prepare possible food chain(s) from them.
- (b) To determine the density abundance of different herbaceous plants growing in a community by Quadrate method (size : approx. 50 sq. meter).
- (c) To make temporary slide preparation of stems/leaves/roots (TS/LS) from any two of the following representing *different habitats* :

*Water hyacinth; Pistia, Euphorbia;
Asparagus, Nerium; Orchid roots*

Also draw and describe a comparative account on their morphology and anatomy.

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