

2017

BOTANY

[Gen. Elective]

(CBCS)

(Practical)

PAPER —GE1P

Full Marks : 20

Time : 2 hours

Answer all questions

The figures in the right hand margin indicate marks

- 1. Make a microscopic preparation of specimen A.
Draw and Comment on your observation.**

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[Slide preparation—2, Drawing—2, Comment—2]

2. Make a suitable vegetative/reproductive slide preparation of the sample "B". Comment on the observation. Identify the genus. 6
[Preparation—2, Comment—3, Identification—1]
3. Identify the specimen 'C', 'D', 'E' from following permanent slides with reason. 1 × 3
4. Laboratory Note Book. 2
5. Viva-voce. 3
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Instruction for the Examiners

1. Specimen 'A'-Bacterial suspension/curd/Algae/
Fungi should be supplied to all students of a
batch.
2. For each Batch of candidates two specimen(B)
with vegetative /reproductive structures should be
selected. Selected specimens should be supplied
to the candidates alternately of the same batch.

Algal specimens for Q.1 (Sample A)

- (i) *Chlamydomonas* spp -- Sex organs
Oedogonium spp --Macrandous thallus with
 oogonium.
Vaucheria spp -- Vegetative with reproduction
 structures.
Polysiphonia spp -- Thallus with cystocarp/
 Tetrasporangia.

Fungi specimens for Q.1 (Sample A)

- (ii) *Rhizopus* spp -- Thallus with sporangia
 and Zygosporangium
Penicillium spp -- Thallus with Conidia
Agaricus spp -- Matrox basidiocarp

Bryophytes, Pteridophytes and Gymnosperms
for Q.1 (Specimens 'B')

- (i) *Marchantia* spp – Thallus with antheri-
 diophore/Archegoniophore
Funaria spp –Thallus with Capsule(l.s)
- (ii) *Selaginella* spp –L.S of strobilus
Equisetum spp –L.S of strobilus
Pteris spp – V.S of sporophyll or W.M
 of sporangium
 Cycas— ts of leaflet, microsporophyle
 Pinus— ts. of needle, stem, LS. of male cone.

3. Any five permanent slides/microscopic materials, vegetative structure/reproductive materials for specimens 'C', 'D' and 'E' from the following groups (not more than one form any group)

C. Virus and Bacteria (Excepting specimen 'A')

Models of viruses— T-phage and T.m.V

Line drawing of Lytic and Lysogenic cycle

Types of Bacteria— From slides/photographs

Binary Fission of Bacteria— From slides

Conjugation of Bacteria— From slides.

G Pteridophytes (Excepting the specimen 'B')

Selaginella spp – T.S. of stem, w.m of leaf and
ligule

Equisetum spp – T.S of Thizome/internodes

Pteris spp – Young sporophyle, L.S of
rachis

Gymnosperms—

Cycas spp – Male cone. T.S of coralloid root.

Pinus spp – L.S. of Male cone/L.S of Female
cone.

4. Laboratory Note Books should be properly signed by the concerned teachers.
 5. Examiners should ask any question related to practical.
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