Total No. of Printed Pages—3

2 SEM TDC BOTH (CBCS) C 3

2026

(May/June)

BOTANY

(Core)

Central Library & Information Centre • Sibsagar Girls' College • Date .....

Paper : C–3

(Mycology and Phytopathology)

Full Marks : 53

Pass Marks : 21

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. *(a)* Choose the correct answer : 1×3=3

(i) The cell wall of fungi consists of cellulose / chitin / hemicellulose / None.

(ii) Fungi with no known sexual stage are placed in ascomycetes / deuteromycetes / zygomycetes / None.

(iii) Motile spores are present in *Puccinia* / *Synchytrium* / *Rhizopus* / *Penicillium*.

(b) Fill in the blanks of the following : 1×2=2

(i) The plant diseases which spread widely but occur periodically are called _____.

(ii) _____ is a symbiotic association between algae and fungi.

2. Write short notes on any *three* of the following : 4×3=12

(a) Mode of nutrition in fungi

(b) Significance of Mycorrhiza

(c) Economic and ecological importance of lichen

(d) Fungi as biocontrol agents

3. With suitable diagram, describe the life cycle of *Peziza*. 12

Or

Describe the life history of an edible fungus that you have studied. State its economic importance. 8+4=12

4. Write, in detail, about the application of fungi in the food industry. 12

Or

Write explanatory notes on the following : 6×2=12

(a) Mycotoxins for biological control

(b) Host-Pathogen relationship

5. Mention the symptoms, names of the causal organisms and control measures of the following diseases (any *three*) : (1+1+2)×3=12

(a) Early blight of potato

(b) Citrus canker

(c) Tobacco mosaic disease

(d) Black stem rust of wheat

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2 SEM TDC BOTH (CBCS) C 4

2026

(May/June)

Central Library & Information Centre
Sibsagar Girls' College
Date .....

BOTANY

(Core)

Paper : C–4

(Archegoniate)

Full Marks : 53

Pass Marks : 21

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Choose the correct answer : 1×5=5

(a) Spore-bearing organ 'sporocarp' is found in *Selaginella* / *Marsilea* / *Ophioglossum.*

(b) Reticulate venation is found in the leaves of *Ginkgo* / *Cycas* / *Gnetum.*

(c) Pollination in gymnosperm is exclusively done by insects / water / air.

(d) The sporophyte of *Riccia* is composed of only foot / only seta / only capsule.

(e) Rhizophores are present in *Lycopodium* / *Selaginella* / *Equisetum*.

2. Write short notes on any *three* of the following : 4×3=12

(a) Capsule of polytrichum

(b) Primitive character of *Equisetum*

(c) Adaptive characters of archegoniate to survive on land

(d) 'Tentpole' of *Ginkgo*

3. With suitable sketches, describe the evolution of sporophytes in bryophytes. Which one is most primitive according to your opinion? 3+7+2=12

Or

With suitable diagrams, compare the external and internal structure of gametophyte of *Riccia* and *Marchantia*. 4+8=12

4. Give a comparative account of the spore-bearing structures of *Selaginella*, *Equisetum* and *Ophioglossum* with sketches. 9+3=12

Or

Distinguish between homospory and heterospory. Describe the heterospory nature of *Selaginella* with suitable diagram. Mention the significance of heterospory in seed habit. 2+7+3=12

5. Write explanatory notes on any *two* of the following : 6×2=12

(a) Theory of fossilization

(b) Heterophylly in Sphenophyllum

(c) Ecological and economic importance of gymnosperms

(d) Angiospermic characters of *Gnetum*

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