



K23U 1980

Reg. No.:

Name :

**II Semester B.Sc. Degree (CBCSS – OBE – Regular/Supplementary/
Improvement) Examination, April 2023
(2019 Admission Onwards)
COMPLEMENTARY ELECTIVE COURSE IN BOTANY
2C02BOT : Bryology, Pteridology, Gymnosperm Biology, Palaeobotany,
Phytopathology and Angiosperm Embryology**

Time : 3 Hours

Max. Marks : 40

Instruction : Draw diagrams **wherever** specified.

PART – A

Objective Type Questions. Answer **all**.

(4×1=4)

- Citrus canker is caused by
a) Fungus b) Virus c) Bacteria d) Mycoplasma
- The fossil Rhynia belongs to the geological period.
a) Devonian b) Silurian c) Cretaceous d) Ordovician
- The plant Selaginella is a
a) Gametophyte b) Sporophyll c) Sporocarp d) Sporophyte
- A flower with half inferior ovary is called
a) Hypogynous b) Perigynous c) Epigynous d) None of these

PART – B

Short Essay Questions. Answer **any eight**.

(8×2=16)

- What is heterospory ? Write an example.
- Describe the most common vegetative propagation in Riccia.
- Define a protostele.

P.T.O.



8. Write two similarities each between Gymnosperms and Angiosperms.
9. Write four economic importances of Gymnosperms.
10. Differentiate Paleobotany and Paleontology.
11. Write down the characters of *Cycas* microsporophyll.
12. What is Helobial endosperm ?
13. Write down the symptoms and causative organism of Tapioca mosaic disease.
14. What is megasporogenesis ?
15. What is polyembryony ? Write down one significance.
16. What is monosporic embryo sac ?

PART – C

Essay Questions. Answer **any four**.

(4×3=12)

17. Differentiate microsporogenesis and microgametogenesis.
18. Differentiate dicot and monocot embryo.
19. Describe nuclear endosperm with a diagram.
20. Describe briefly the habit of *Lepidodendron*.
21. Describe the different period of geological time scale.
22. Describe the thallus anatomy of *Riccia* with a diagram.

PART – D

Long Essay Questions. Answer **any one**.

(1×8=8)

23. Explain the different types of embryo sac. Add a note on pollination and fertilization.
 24. Explain symptoms, causative organism and control measures of any four-plant diseases.
 25. Explain the formation of different types of fossils.
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K24U 1607

Reg. No.:

Name :

**Second Semester B.Sc. Degree (CBCSS – OBE-Regular/Supplementary/
Improvement) Examination, April 2024**

(2019 Admission Onwards)

COMPLEMENTARY ELECTIVE COURSE IN BOTANY

**2C02BOT : Bryology, Pteridology, Gymnosperm Biology, Palaeobotany,
Phytopathology and Angiosperm Embryology**

Time : 3 Hours

Max. Marks : 40

Instruction : Draw diagrams wherever necessary.

SECTION – A

Objective type questions. Answer **all**.

1. In Riccia, the arrangement of sex organs is
 - a) Basipetal
 - b) Acropetal
 - c) Scattered
 - d) Mesopetal
2. Ploidy of Cycas endosperm is
 - a) Haploid
 - b) Diploid
 - c) Triploid
 - d) Tetraploid
3. The current Era according to geologic time scale is
 - a) Mesozoic
 - b) Cenozoic
 - c) Paleozoic
 - d) Pre-cambrian
4. Abnormal increase of size of cells in plant disease is
 - a) Hypertrophy
 - b) Hypoplasia
 - c) Hyperplasia
 - d) Hypotrophy

(4×1=4)

P.T.O.



SECTION – B

Short essay questions. Answer **any eight**.

5. Mention 3 major classes of bryophytes with examples.
6. What are horn-worts ? Give examples.
7. Explain the photosynthetic zone of Riccia.
8. Describe the significance of rhizophore.
9. Write notes on transfusion tissue.
10. Comment on relationship between Gymnosperms with Angiosperms.
11. Explain the structure of megasporophyll of Cycas.
12. Define Compression fossils.
13. Describe fossil bryophytes.
14. Comment on Cycadofilicales.
15. Distinguish between monothealous and dithealous anthers.
16. Write notes on Filiform apparatus.

(8×2=16)

SECTION – C

Essay questions. Answer **any four**.

17. Describe the economic importance of bryophytes.
18. Mention the fern characteristics of Cycas.
19. Elaborate the structure and reproduction of Rhynia.
20. Classify the plant diseases based on causative organisms.



21. Describe various types of placentations.

22. Comment on helobial endosperm.

(4×3=12)

SECTION – D

Long essay questions. Answer **any one**.

23. Explain the reproduction and life cycle of Selaginella.

24. Write an essay on Citrus canker and Root-knot of banana.

25. Describe various types of pollination mechanisms with suitable examples.

(1×8=8)

