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		Pog No

THIRD SEMESTER (CBCSS—UG) DEGREE EXAMINATION NOVEMBER 2024

Botany

BOT 3B 03—PHYCOLOGY, BRYOLOGY AND PTERIDOLOGY

(2019—2023 Admissions)

Time: Two Hours

Maximum: 60 Marks

Section A

Answer all questions.

Each question carries 2 marks.

Ceiling: 20 Marks.

- 1. What is Syanangium? Write down an example.
- 2. Distinguish between globule and nucule?
- 3. Write critical notes on coenobium.
- 4. Mention the importance of algae in agriculture.
- 5. Comment on Aplanospores and Zoospores.
- 6. Briefly evaluate the sporophyte of Riccia.
- 7. State the features of Pinnularia.
- 8. Give an account of distinguishing features of Bryophytes and Pteridophytes.
- 9. What is Glossopodium? Cite suitable example.
- 10. Describe the mode of reproduction in Vaucheria.
- 11. What are the economic importance of Pteridophytes.
- 12. Which are the reserve food products in brown and red algae?

Turn over

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Section B

Answer all questions.

Each question carries 5 marks.

Ceiling: 30 Marks.

- 13. Draw and explain the structure of sporophyte of Funaria.
- 14. Write an account of classification of Pteridophyte by Smith et al. (2008).
- 15. Briefly explain the morphological features of Equisetum.
- 16. Explain the structure of sporophyte of Anthoceros.
- 17. Describe the heterospory and seed habit in Pteridophytes.
- 18. Explain the Harmful effects of algae.
- 19. Describe the features of Pteris.

Section C

Answer any **one** question. The question carries 10 marks.

- 20. Explain the different mode of reproduction in algae
- 21. Give an account on stelar evolution in Pteridophytes.

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THIRD SEMESTER (CBCSS—UG) DEGREE EXAMINATION NOVEMBER 2023

Botany

BOT 3B 03—PHYCOLOGY, BRYOLOGY AND PTERIDOLOGY

(2019—2022 Admissions)

Time: Two Hours

Maximum: 60 Marks

Section A

Answer all questions, each question carries 2 marks.

Ceiling: 20 marks.

- 1. What are Indusia?
- 2. Differentiate between isogamy and anisogamy.
- 3. What is Apogamy?
- 4. Mention the importance of cyanobacteria in agriculture.
- 5. Comment on the structure of cystocarp in Polysiphonia.
- 6. Briefly evaluate the sporophyte of Riccia.
- 7. State the characteristics of a diatom cell.
- 8. Give an account of the features of Bryophyte.
- 9. What is glossopodium? Cite a suitable example.
- 10. Describe the types of reproduction seen in Vaucheria.
- 11. What is Actinostele?
- 12. Write two examples of fossil Bryophyes.

Turn over

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Section B

Answer all questions, each question carries 5 marks.

Ceiling: 30 Marks.

- 13. Draw the structure of a mature sporophyte of Funaria
- 14. Write an account of the pigments in different classes of algae
- 15. Explain the anatomy of Equisetum stem
- 16. Explain the structure of sporophyte of Anthoceros
- 17. What is Heterospory? 'Heterospory leads to seed habit'. Comment on it
- 18. Describe the importance of Carrageenan and Algin
- 19. Describe the structure of strobilus in Equisetum.

Section C

Answer any one question, each question carries 10 marks.

- 20. Explain the economic importance in algae.
- 21. Give an account of stelar evolution in Pteridophytes.

 $(1 \times 10 = 10 \text{ marks})$

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THIRD SEMESTER (CBCSS—UG) DEGREE EXAMINATION NOVEMBER 2022

Botany

BOT 3B 03—PHYCOLOGY, BRYOLOGY AND PTERIDOLOGY

(2019 Admission onwards)

Time: Two Hours

Maximum: 60 Marks

Section A

Answer **all** questions, each question carries 2 marks.

Ceiling 20 marks.

- 1. Describe the formation of auxospore in diatoms.
- 2. Write a brief account on algal pigments.
- 3. Describe the ultra structure of *Nostoc* cell.
- 4. Explain the formation of daughter colony in *Volvox*.
- 5. Draw a labelled diagram of a nannandrous Oedogonium filament.
- 6. Compare the rhizoids of Riccia with that of Funaria.
- 7. Write an account on fossil bryophytes.
- 8. What is peat? What is its importance?
- 9. Write notes on apogamy in pteridophytes, citing an example.
- 10. What is synangium? Give an example.
- 11. Describe sorus and sporangium in Pteris.
- 12. Distinguish endosporic and exosporic gametophytes, citing examples.

(Ceiling 20 marks)

Turn over

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Section B

2

Answer all questions, each question carries 5 marks.

Ceiling 30 marks.

- 13. Describe the structure of thallus in *Chara*.
- 14. Write an account on sexual reproduction and carposporophyte in *Polysiphonia*.
- 15. Describe the external and internal features of Anthoceros gametophyte.
- 16. Explain the structure of capsule in *Funaria*. Add a note on its dehiscence.
- 17. Describe different types of siphonosteles found in pteridophytes with examples.
- 18. Write an account on the economic importance of pteridophytes.
- 19. Explain the external features of *Equisetum* sporophyte.

(Ceiling 30 marks)

Section C

Answer any one question, the question carries 10 marks.

- 20. Write an essay on the economic importance of algae.
- 21. What are the characteristics of seed habit? Comment on seed habit in pteridophytes with reference to *Selaginella*.

 $(1 \times 10 = 10 \text{ marks})$