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Reg. No. :

Code No. : 10857 E Sub. Code : EMBO 31

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2024.

Third Semester

Botany — Core

**PLANT DIVERSITY – III — BRYOPHYTES AND
PTERIDOPHYTES**

(For those who joined in July 2023 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. These plants are called as Amphibious plants
(a) Fungi (b) Algae
(c) Bryophytes (d) Pteridophytes
2. Classification of Bryophytes in 1951 was proposed by
(a) Fritsch (b) Rothmaler
(c) Alexopoulos (d) Bentham

3. The structure which helps in the dehiscence of spores of marchantia is
(a) Foot (b) Eiaters
(c) Seta (d) Gemmae
4. Name the region which gives rise to columella in Anthoceros capsule
(a) Endothecium (b) Exothecium
(c) Amphithecium (d) Epidermis
5. Which is called as vascular cyptograms
(a) Bryophytes (b) Pteridophytes
(c) Angiospersm (d) Algae
6. Who first discovered apospory?
(a) Smith (b) Sporne
(c) Druery (d) Fritsch
7. Selaginella are called as
(a) Maiden hair fern (b) Horse tail
(c) Resurrection plant (d) Fern

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8. How many lobes are present in psilotum synangium?

- (a) 2 (b) 4
(c) 3 (d) 5

9. Which plant is known as water fern?

- (a) Psilotum
(b) Lycopodium
(c) Marsilea
(d) Cycas

10. The plant which is used to diuretic is

- (a) Lycopodium (b) Selaginella
(c) Equisetum (d) Pinus

PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Give the general characters of Bryophytes.

Or

(b) Comment briefly on the classification of bryophytes.

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12. (a) Give concise account of the male and female reproductive structures of Marchantia.

Or

(b) Describe the internal structure of Anthoceros thallus.

13. (a) What is Heterospory? Describe briefly.

Or

(b) What is apospory? Explain it giving suitable example.

14. (a) Describe the structure of synangium of psilotum.

Or

(b) Explain the transverse section of Selaginella stem with diagram.

15. (a) Explain the external structure of Marsilea.

Or

(b) Write the economic importance of pteridophytes.

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PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Write the economic importance of bryophytes in industries.

Or

- (b) Give a detailed account on role of bryophytes in pharmaceuticals.

17. (a) Explain the structure of sporophyte of marchantia.

Or

- (b) With the help of suitable diagram's describe the structure of the gametophyte of polytrichum.

18. (a) List out the general characters of pteridophytes.

Or

- (b) What is apogamy? Explain it with suitable examples.

19. (a) Write the sexual reproduction takes place in psilotum.

Or

- (b) Describe the reproduction takes place in selaginella.

20. (a) Explain the internal structure of marsilea sporocarp.

Or

- (b) Explain the internal structure of marsilea stem and petiole.

