

E 6143



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Reg. No.....

Name.....

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, SEPTEMBER 2024

Sixth Semester

Core Course—BRYOLOGY, PTERIDOLOGY, GYMNOSPERMS AND PALEOBOTANY

(Common for B.Sc. Botany Model I, Model II)

(2011 and 2012 Admissions)

Time : Three Hours

Maximum Weight : 25

Part A (Objective Type)

Answer all questions.

Weight 1 each for a bunch of four questions.

I. 1 In cycas vegetative reproductive takes place by :

- (a) Sporophylls. (b) Rhizome.
(c) Leaves. (d) Bulbils.

2 Bract scales are meant for :

- (a) Photosynthesis. (b) Protection.
(c) Transpiration. (d) Reproduction.

3 Stele where xylem is surrounded by phloem is called :

- (a) Protostele. (b) Siphonostele.
(c) Solenostele. (d) Dictyostele.

4 Which of the following is known as club moss ?

- (a) Lycopodium. (b) Ephedra.
(c) Psilotum. (d) Selaginella.

II. Fill in the blanks with appropriate word or words :

5 Sago is obtained from _____.

6 Spindle shaped cells that help in the dispersal of spores in Marchantia are called _____.

7 Sterile structures seen intermingled with autheredia of Funaria are called _____.

8 _____ is known as Father of Indian Paleobotany.





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III. Name the following :

- 9 Aquatic species of Riccia.
- 10 Famous Indian Bryologist.
- 11 Lateral lump of tissue found in embryo of Gnetum.
- 12 Cavity formed by the disintegration of Protoxylem in Equisetum.

IV. Match the following :

- 13 Tubercled Rhizoid – Funaria.
- 14 Peristome – Selaginella.
- 15 Ligule – Pinus.
- 16 Annual Rings – Riccia.

(4 × 1 = 4)

Part B (Short Essay Questions)

*Answer any five of the following.
Weight 1 each.*

- 17 What is diploxyly ?
- 18 What is Sulphur shower ?
- 19 Describe the morphology of Sporocarp of Marsilea.
- 20 What is synangium ?
- 21 What is amber ?
- 22 What are coralloid roots ?
- 23 What is columnella ?
- 24 Define polyembryony.

(5 × 1 = 5)

Part C (Short essay/Problem Solving Type)

*Answer any four of the following.
Weight 2 each.*

- 25 Enlist the aquatic characters of Marsilea.
- 26 Explain the structure of Sorus in Pteris.
- 27 Describe the structure of Cycasovule.





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- 28 What are Petrefactions ?
- 29 Explain the structure of Sporophyte of Anthoceros.
- 30 Mention any four similarities of Pteridophytes with Bryophytes.

(4 × 2 = 8)

Part d (Essay Type)

*Answer any **two** of the following.
Weight 4 each.*

- 31 Describe the angiosperm characters of Gnelum.
- 32 Describe the life cycle of Psilotum.
- 33 With suitable sketches explain Stelar evolution in Pteridophytes.

(2 × 4 = 8)

