

PAPER CODE – -----
M. Sc. Semester-I Examination, 20XX
BOTANY
Paper No. - XXX
[Biology & Diversity of Cryptogamic Plants]

Time: Three hours

Maximum Marks: 80

Passing Marks: 29

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Note: (1) Section -A is compulsory containing 10 objective type questions of 10 marks and 5 short answer type questions of 10 marks. (2) Section-B containing 8 descriptive type questions with 50% internal choice carrying 15marks for each

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Section - "A"

Q.1 Answer the following questions --

(1X10= 10) Marks

- i. What is the reserve food of red algae?
- ii. Thallus of which alga is an irregular colony?
- iii. Auxospores are produced by algae of which class?
- iv. Which alga is used for production of 'Agar' in industry?
- v. Write the name of an Indian Bryologist.
- vi. Blue Green Algae are associated with thallus of which bryophytes?
- vii. Write the name of an aquatic bryophyte.
- viii. Which type of stele is found in *Lycopodium clavatum*?
- ix. Synangium is found in which Pteridophyta?
- x. In which period the first land vascular plant was developed?

Q.2 Answer the following questions --

(2X5= 10) Marks

- i. What is the significance of 'heterocyst'?
- ii. What is the role of elaters in capsule of Marchantia?
- iii. What do you mean by Carposporophyte?
- iv. Point out the land habit of Bryophytes.
- v. Draw a line diagram of LS of the cone Equisetum.

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Section - "B"

Attempt any four questions ---

4 x 15 = 60 Marks

- Q.3. What are the chief criteria for classification of algae? Give a brief account of the classification of algae.
- Q.4. Write short notes on –
 (i) Flagella in Algae (ii) Asexual Reproduction in Bacillariophyceae
- Q.5. Give a brief account of the use of Algae as food, feed and industrial raw materials.
- Q.6. What are the characteristic features of Phaeophyta? Discuss the mode of life cycle exhibited by the member of Paeophyta.
- Q.7. Give an illustrated account of the economical and ecological importance of Bryophytes.
- Q.8. "Anthocerotales is a Synthetic group" – discuss and justify.
- Q.9. What do you mean by Heterospory? Discuss and justify that the hetetrospory exhibits the origin of seed habit.
- Q.10. Write a brief account of -
 (i) Gametophyte of Pteropsida (ii) Affinities of Sphenopsida

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