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**Y—70—2019**

**FACULTY OF SCIENCE**

**B.Sc. (First Year) (Second Semester) (Backlog) EXAMINATION**

**NOVEMBER/DECEMBER, 2019**

**BOTANY**

**Paper III**

**(Diversity of Cryptogams)**

**(MCQ & Theory)**

**(Monday, 23-12-2019)**

**Time : 10.00 a.m. to 12.00 noon**

*Time—2 Hours*

*Maximum Marks—40*

- N.B. :—*
- (i) Attempt *All* questions.
  - (ii) *All* questions carry equal marks.
  - (iii) Use separate answer-sheet for MCQ (OMR sheet) and descriptive questions.
  - (iv) Draw a well labelled diagrams wherever necessary.

**MCQ**

1. Choose the *correct* answers of the following questions : 10
- (i) Reticulate chloroplast is present in .....
    - (a) Oedogonium
    - (b) Chara
    - (c) Ectocarpus
    - (d) Batrachospermum
  - (ii) Glomerule is present in .....
    - (a) Oedogonium
    - (b) Batrachospermum
    - (c) Ectocarpus
    - (d) Chara

P.T.O.

- (iii) Which of the following is marine alga ?
- (a) Oedogonium (b) Chara  
(c) Ectocarpus (d) Batrachospermum
- (iv) Globule is found in .....
- (a) Oedogonium (b) Ectocarpus  
(c) Batrachospermum (d) Chara
- (v) Phycoerythrin pigment is present in .....
- (a) Phaeophyceae (b) Rhodophyceae  
(c) Xanthophyceae (d) Chlorophyceae
- (vi) In Bryophyta, leafy gametophyte is present in .....
- (a) Funaria (b) Anthoceros  
(c) Riccia (d) All of these
- (vii) Numbers of peristomal teeth in the capsule of Funaria are .....
- (a) 24 (b) 29  
(c) 30 (d) 32
- (viii) Amphiphloic siphonostele occurs in the rhizome of .....
- (a) Marsilea (b) Psilotum  
(c) Lycopodium (d) Equisetum
- (ix) Elaters are present in spores of .....
- (a) Marsilea (b) Equisetum  
(c) Lycopodium (d) None of these
- (x) Heterosporous condition occurs in .....
- (a) Equisetum (b) Anthoceros  
(c) Marsilea (d) Lycopodium

**Theory**

2. Describe unilocular and plurilocular sporangia in Ectocarpus. 10

*Or*

Explain in brief :

(a) Nucule in chara 5

(b) Classification of algae 5

3. Explain in detail sexual reproduction in Funaria. 10

*Or*

Write in short :

(a) External structure of thallus of Riccia 5

(b) Classification of Bryophytes 5

4. Give the systematic position and describe the external structure of sporophyte of Equisetum.

*Or*

Describe in brief :

(a) Classification of Pteridophytes 5

(b) Internal structure of petiole of Marsilea. 5