

This question paper contains 3 printed pages]

**R—57—2017**

**FACULTY OF SCIENCE**

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

**MARCH/APRIL, 2017**

**(CBCS/CGPA Pattern)**

**BOTANY**

**Paper III**

**(Diversity of Cryptogams)**

**(MCQ + Theory)**

**(Friday, 31-3-2017)**

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

**Time—2 Hours**

**Maximum Marks—10+30=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 diagram wherever necessary.

**MCQ**

**10**

1. Choose the *correct* answers of the following questions :

- (1) Reticulate chloroplast is present in .....
  - (A) Batrachospermum
  - (B) Oedogonium
  - (C) Ectocarpus
  - (D) Chara
- (2) Glomerule is present in .....
  - (A) Oedogonium
  - (B) Chara
  - (C) Ectocarpus
  - (D) Batrachospermum
- (3) Ectocarpus belongs to class .....
  - (A) Pheophyceae
  - (B) Rhodophyceae
  - (C) Xanthophyceae
  - (D) Chlorophyceae

**P.T.O.**

- (4) Nucule and Globule are sex organs of .....  
 (A) Ectocarpus (B) Batrachospermum  
 (C) Chara (D) Oedogonium
- (5) Riccia belongs to class .....  
 (A) Hepaticopsida (B) Anthocerotopsida  
 (C) Bryopsida (D) Lycopsidea
- (6) Thalloid gametophyte is present in .....  
 (A) Funaria (B) Polytrichum  
 (C) Riccia (D) All of these
- (7) The number of peristomal teeth in the capsule of Funaria is .....  
 (A) 32 (B) 8  
 (C) 24 (D) 16
- (8) Vallecular and carinal canals are seen in the stem of .....  
 (A) Lycopodium (B) Marsilea  
 (C) Psilotum (D) Equisetum
- (9) Amphiphloic siphonostele is found in the rhizome of .....  
 (A) Marsilea (B) Lycopodium  
 (C) Equisetum (D) Psilotum
- (10) Equisetum belongs to class .....  
 (A) Pteropsida (B) Sphenopsida  
 (C) Psilopsida (D) Lycopsidea

### Theory

2. Give systematic position and describe the thallus structure of Chara. 10

Or

Explain in brief :

- (a) Nannandrium in Oedogonium 5  
 (b) Unilocular Sporangia in Ectocarpus. 5

3. Describe external and internal structure of leafy gametophyte of *Funaria*. 10

*Or*

Write in short :

- (a) Archegonium in *Riccia* 5  
 (b) Classification of Bryophytes. 5
4. Describe internal structure of internode of aerial stem of *Equisetum*. 10

*Or*

Describe in brief :

- (a) External structure of sporocarp of *Marsilea*. 5  
 (b) Classification of pteridophytes. 5