

P.G. 1st Semester - 2016

BOTANY

Paper : MBOTCCT-103

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP-A

(Bryology)

(Marks : 20)

1. Answer any five of the following : $1 \times 5 = 5$
- Cite an example of a bryophyte from desert habitat.
 - What is matrotrophy?
 - In which member of Anthocerotophyta symbiotic relationship with cyanobacteria is absent?
 - In which member of bryophyta plate-like protonema is found?
 - In which member of bryophytes rhizoids are absent?

- Name an aquatic liverwort that grows in completely submerged condition.
- Define autoicous moss.
- Write the scientific name of copper moss.

2. Write short note on any one of the following : $5 \times 1 = 5$

- Economic importance of bryophytes.
- Write briefly about the role of bryophyte as indicator of pollution.

3. Answer any one of the following : $10 \times 1 = 10$

- Describe briefly the characteristic features and affinities of fossil bryophytes with suitable illustration. Cite two examples of fossil bryophytes which were discovered from India. $8 + 2 = 10$
- Write a short note on fundamental architecture and diversification of peristome teeth in moss mentioning examples. Mention the organization of sporophytic plant body in hornworts. $6 + 4$

GROUP-B

(Pteridology)

(Marks : 20)

4. Answer any five of the following : $1 \times 5 = 5$

- a) What is perispore?
- b) Cite one example of homosporous aquatic fern.
- c) Which are the most comprehensive terpenoidal markers in pteridophytes?
- d) Mention the name of earliest lycopod.
- e) Cite one example of endangered pteridophyte.
- f) Name an edible Pteridophyte.
- g) Name one pantropical and notorious weed of salvinaceae.
- h) Name one pteridophytic family that is characterized by an absence of indusium.

5. Write short notes on any one of the following :

$5 \times 1 = 5$

- a) Antheridogens
- b) Soral evolution in ferns

6. Answer any one of the following : $10 \times 1 = 10$

- a) Describe the different types of stomata in pteridophytes with suitable illustration.
- b) Which is the most primitive vascular plant known? Discuss organography of earlier vascular plants and evolutionary trend.

$1 + 5 + 4 = 10$
