



**I Semester B.Sc. M.Sc. (Integrated Course) Degree  
Examination, December 2017/January 2018  
(CBCS)  
BIOLOGICAL SCIENCES  
IBS101 : Systematics and Diversity of Non-Vascular Plants**

Time : 3 Hours

Max. Marks : 70

***Instruction*** : Illustrate *wherever* necessary.

SECTION – A

I. Explain/define **any ten** of the following in **three to five** sentences. **(10×2=20)**

- 1) a) TMV
- b) Endomycorrhiza
- c) Virioids
- d) *Rhizopus*
- e) PPLO
- f) Rickettsiae
- g) Nucule
- h) Columella
- i) Akinetes
- j) Fucoxanthin
- k) Amphithecium
- l) Amphigastria.

SECTION – B

II. Write critical notes on **any four** of the following. **(4×5=20)**

- 2) Economic importance of viruses.
- 3) Salient features of *Sargassum*.
- 4) Classification of fungi.
- 5) Cultivation of algae.

P.T.O.



- 6) General characters of Cyanobacteria.
- 7) Spore dispersal mechanism in *Sphagnum*.
- 8) Development of Sporophyte of *Marchantia*.

SECTION – C

III. Give a comprehensive account of **any two** following.

**(2×15=30)**

- 9) Genetic recombination in Bacteria.
  - 10) Structural diversity and Reproduction in Basidiomycetes.
  - 11) Reproduction in Diatoms.
  - 12) Structure and development of sporophyte in *Anthoceros*.
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