## Il Semester B.Sc. Examination, May 2017 (CBCS) (2014 - 15 & Onwards) (Fresh + Repeaters) **BOTANY - II**

Diversity of Non-Vascular Plant (Part – II) Mycology, Plant Pathology, Bryophytes and Plant Anatomy

Time: 3 Hours

Max. Marks: 70

Instructions: 1) Answer all questions.

2) Draw diagrams wherever necessary.

## PART – A

A. Explain/Define **any ten** of the following in **two** or **three** sentences:  $(10 \times 2 = 20)$ 

- 1) Name any four types of Asexual spores in fungi.
- 2) What is monokaryotic mycelium? Give example.
- 3) What are Carpogonia? Give example.
- 4) Write any two symptoms and causal organism of coffee rust.
- 5) Differentiate between chlorotic and necrotic lesions.
- 6) Write any two control measures of Red rot of sugarcane.
- 7) Differentiate between rhizoids and scales of Marchantia.
- 8) What are pseudoelaters? Mention their function.
- 9) List any two important characters of Bryophytes.
- 10) Write any two differences between Tracheids and Trachea.
- 11) Mention any two functions of collenchyma.
- 12) What are Tyloses?



## PART-B

B. Write critical notes on any four of the following:

 $(4 \times 5 = 20)$ 

- 13) Uredospore stage of puccinia.
- 14) Mycorrhiza.
- 15) L.S. of Gemma Cup.
- 16) T.S. of Anthoceros thallus.
- 17) Types of sclereids.
- 18) Secretory tissues.

## PART-C

C. Give a comprehensive account of any three of the following:

 $(3 \times 10 = 30)$ 

- 19) Economic importance of fungi in the field of medicine and agriculture.
- 20) Explain the symptoms, causal organism and control measures of Blast disease of Rice.
- 21) Explain:
  - a) Bacillus thuerngiensis as Biopesticide
  - b) Grain smut of Sorghum
- 22) With the help of a neat labelled diagram, explain the L.S. of sporophyte of Marchantia.
- 23) With the help of a neat labelled diagram, explain anomalous secondary growth in Dracaena stem.