



I Year B.Sc. Degree Examination, September/October 2012

Directorate of Distance Education

**BOTANY**

**Paper – I : Protophyta, Thallophyta, Bryophyta and Pteridophyta**

Time: 3 Hours

Max. Marks: 75/85

- Instructions :**
- 1) Students who have attended **25 Marks IA** Scheme will have to answer for total of **75 Marks**.
  - 2) Students who have attended **15 Marks IA** Scheme will have to answer for total of **85 Marks**.
  - 3) **One** mark questions should be answered in **first two** pages of the answer book.
  - 4) Draw **neat** labelled diagrams **wherever** necessary.
  - 5) Question No. **V** is **compulsory** for **85** marks scheme.

I. Simple answer questions : (1×10=10)

Answer in a word, or a phrase or a sentence.

- 1) What are Capsomeres ?
- 2) Write the common name of *Batrachospermum*.
- 3) Define Mycelium.
- 4) Define Polar nodules.
- 5) What is the function of Peristome ?
- 6) What are nitrifying bacteria ?
- 7) Name a pteridophyte whose spores have elaters.
- 8) Define Isidia.
- 9) What kind of stele present in aerial shoot of *Psilotum* ?
- 10) Name the fruiting body of *Peziza*.

II. Short answer questions : (5×3=15)

Write **any FIVE** of the following :

- 11) Classify the bacteria on the basis of flagellation.
- 12) Draw a neat labelled diagram of TMV.



- 13) Describe the structure of *Nucule*.
- 14) Write a note on tikka disease.
- 15) Explain Cleistothecium.
- 16) Explain antheridium of *Porella*.
- 17) Write the hydrophytic characters of *Equisetum*.

III. Medium answer questions : (5×6=30)

Answer **any FIVE** of the following :

- 18) Describe transformation in Bacteria.
- 19) With neat labelled diagram explain v/s of lichen apothecium.
- 20) Describe the internal structure of main axis and leaf in *Sargassum*.
- 21) Explain the structure of sex organs in *Funaria*.
- 22) Describe the internal structure of *Pteris* rhizome.
- 23) Explain the structure of *Spirulina*. Add a note on its economic importance.

IV. Long answer questions : (2×10=20)

Answer **any TWO** of the following :

- 24) Describe the life cycle in *Batrachospermum*.
- 25) Explain life cycle of *Puccinia* on the primary host.
- 26) Describe the L/S of sporophyte of *Anthoceros* with neat labelled diagram.
- 27) Give an account on structure of strobilus in *Selaginella*.

V. **Compulsory** questions for **85** marks scheme **only** : (1×10=10)

Answer **any ONE** of the following questions :

- 28) Describe the structure and asexual reproduction in *Rhizopus*.
- 29) Explain conjugation method of reproduction in *Spirogyra*.

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