

DSA – 290 (BOT-UG) (F)

First Year B.Sc. Degree Examination, August/September 2008

Directorate of Correspondence Course

BOTANY (Freshers)

Paper – I : Protophyta, Thallophyta, Bryophyta and Pteridophyta

Time : 3 Hours

Max. Marks : 85

- Notes : 1) Answer *all* questions.
2) Draw diagrams *wherever* necessary.

I. Simple questions :

Answer in a word, phrase or sentence :

(10×1=10)

- 1) What is heterospory ?
- 2) Name the female sex organ of chara.
- 3) What is lichen ?
- 4) What is transduction ?
- 5) Name the ascocarp of penicillium.
- 6) What is the common name of anthoceros ?
- 7) Give an example for marine alga.
- 8) What is capsid ?
- 9) Name the pteridophyte which has rootless and leafless sporophyte.
- 10) Name the bacterium which causes citrus canker.

II. Short answer questions :

Answer **any FIVE** of the following :

(5×3=15)

- 11) Describe the structure of TMV.
- 12) Draw a neat labelled diagram of bacterial cell.

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- 13) Explain the antheridial head of Funaria.
- 14) Describe the gametophyte of pteris.
- 15) Write the causal organism, host and symptoms of Tikka disease.
- 16) Explain the cell structure of spirogyra.
- 17) Describe the glomerule of Batrachospermum.

III. **Medium** answer questions :

Answer **any FIVE** of the following :

(5×6=30)

- 18) Describe the structure of Nostoc filament.
- 19) Explain the morphology of Sargassum plant.
- 20) What is heterothallism? Explain the same with reference to sexual reproduction in Rhizopus.
- 21) Give an account of different types of protosteles in pteridophytes.
- 22) Explain the sporophyte of anthoceros in *Rhizopus*.
- 23) Write any six economic importance of bacteria.

IV. **Long** answer questions :

Answer **any THREE** of the following :

(10×3=30)

- 24) Describe the scalariform conjugation in spirogyra.
- 25) Describe uredostage and teleutostage of puccinia.
- 26) With the help of a neat labelled diagram, describe the anatomy of psilotum aerial shoot.
- 27) Write short notes on :
 - a) Sporophyte of porella
 - b) Symptoms of viral diseases.

