

Exam. Code : 103201

Subject Code : 1291

B.A./B.Sc. 1<sup>st</sup> Semester

BOTANY (Diversity of Microbes)

Paper-I-A

Time Allowed—3 Hours]

[Maximum Marks—35

**Note :** Attempt **five** questions in all. Question No. 1 is compulsory. Each question carries **7** marks.

1. Give short answers (3-4 lines) to each of the following :
  - (a) Define mycoplasma.
  - (b) Give the scientific binomial name of button mushroom.
  - (c) Which type of ascocarp is present in *Chaetomium* ?
  - (d) Classify *Sargassum* giving reasons.
  - (e) What do you understand by binary fission ?
  - (f) Name the most important component of fungal and bacterial cell wall.
  - (g) Name any two algal species which yield agar-agar.
2. Write short notes on the following :
  - (a) Reproduction in bacteria
  - (b) Nutrition in bacteria.
3. With the help of examples, describe the economic importance of algae.

4. Give an account of the distribution, general characters and range of cell structures found in cyanobacteria.
5. Draw labelled diagrams of the following :
  - (a) Acervulus of *Colletotrichum*
  - (b) Sporophore of *Agaricus*
  - (c) Cleistothecium of *Eurotium*
  - (d) Budding cells of *Saccharomyces*
  - (e) Sporangiphore and sporangium of *Mucor*
  - (f) Sporangium of *Phytophthora*
  - (g) Uredospore of *Puccinia*.
6. Write briefly on the following :
  - (a) Differences between viruses and bacteria
  - (b) Differences between Ascomycotina and Zygomycotina.
7. Describe the important features and life history of *Volvox*.
8. Describe the types of lichens you have studied. Briefly describe their ecological importance.
9. Describe the important features and life history of *Polysiphonia*.