

Bachelor of Science (B.Sc. Part – I) First Semester
BO-01 – Botany Paper – I (Diversity of Microbes and Algae)

P. Pages : 2

Time : Three Hours



GUG/W/18/1200

Max. Marks : 50

- Notes :
1. All questions are compulsory.
 2. Illustrate your answer with suitable examples and draw well labelled diagrams wherever necessary.

1. What are Bacteriophages? Describe the multiplication of T₄ Bacteriophage. 10

OR

Explain the structure and reproduction of Nostoc. Add a note on its economic importance.

2. Classification of Algae by G. M. Smith. 10

OR

Describe Sexual Reproduction in Vaucheria.

3. Write short notes on :

- a) Cell structure of Mycoplasma. 2½
- b) Economic importance of Bacteria. 2½
- c) Economic importance of Algae. 2½
- d) Unilocular sporangium in Ectocarpus. 2½

OR

- e) Mode of transmission of Viruses. 2½
- f) Reproduction in Gleocapsa. 2½
- g) Cell structure of Chlamydomonas. 2½
- h) Pleurilocular Sporangium in Ectocarpus. 2½

4. Write short notes on :

- a) General characteristics of Life. 2½
- b) Transformation. 2½
- c) Structure (Thallus) of Oedogonium. 2½

d) Structure of Nucule in Chara. 2½

OR

e) Economic importance of Viruses. 2½

f) Bacterial Conjugation. 2½

g) Nannandrium. 2½

h) Structure of Globule in Chara. 2½

5. Write in two or three lines **any ten**. (Diagrams are not necessary) 10

a) Animal Viruses.

b) TMV

c) Capsid

d) Heterocyst

e) Binary fission

f) Prokaryotic

g) Oogonium

h) Phanerogams

i) Cap cell

j) Amylum star

k) Clump formation

l) Chatransia Stage.
