

2024

(FYUGP)

(1st Semester)

BOTANY

(Major)

Paper Code : C-1 BCC-01

(Microbiology and Phycology)

Full Marks : 75

Pass Marks : 40%

Time : 3 hours

**The figures in the margin indicate full marks
for the questions**

Answer five questions, taking one from each Unit

UNIT—1

- 1. Define evolution. Write a general account of Darwin's theory of evolution. 2+13=15**
- 2. Write short notes on the following : 7½×2=15**
 - (a) Concept of species**
 - (b) Mechanism of speciation**

UNIT—2

3. Write a note on the general structure and types of virus. 15

4. Write short notes on the following : $7\frac{1}{2} \times 2 = 15$

(a) DNA virus

(b) Viroid and prions

UNIT—3

5. Write a note on the reproduction of bacteria with diagram. 15

6. Write short notes on the following : $7\frac{1}{2} \times 2 = 15$

(a) General characteristics of bacteria

(b) Mycoplasma and spheroplasts

UNIT—4

7. Write a note on the cell structure and components of an algal cell in detail. 15

8. Write short notes on the following : $7\frac{1}{2} \times 2 = 15$

(a) Range of thallus organization

(b) Methods of reproduction in algae

UNIT—5

9. Describe the reproduction and life cycle of *Nostoc* or *Polysiphonia* with suitable diagrams. 15
10. Write short notes on the following : $7\frac{1}{2} \times 2 = 15$
- (a) General characteristics of Chlorophyta
 - (b) Life cycle of *Chara*

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