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(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*

1. Discuss the various types of microbial nutrition and explain the process of microbial growth.

15

OR

2. Write short notes on any two of the following :

7½×2=15

- (a) Population evolution
- (b) Metabolism in microbes
- (c) Species concept

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

- (a) Bacterial nutrition types
- (b) Economic importance of bacteria

OR

4. Explain the different forms of recombination in bacteria with suitable diagrams. 15

5. Write a note on the types of virus replication with diagrams. 15

OR

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

- (a) Retrovirus
- (b) Discovery and general structure of virus

7. Write notes on any *two* of the following :

$7\frac{1}{2} \times 2 = 15$

- (a) Pigment system in algae
- (b) Flagella in algae
- (c) Economic importance of algae

OR

8. Discuss in detail the classification system of Fritsch.

15

9. Write notes on any *two* of the following :

$7\frac{1}{2} \times 2 = 15$

- (a) Darwin's theory of evolution
- (b) Discovery of bacteria
- (c) Cell structure of bacteria

OR

10. Write notes on any *two* of the following :

$7\frac{1}{2} \times 2 = 15$

- (a) Viroids and prions
- (b) Reproduction in Nostoc
- (c) General characteristics of algae

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