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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*

UNIT—I

1. Define species. Write in detail about the mechanism of speciation.   2+13=15

OR

2. Write on any *two* of the following :   7½×2=15

   (a)   Darwin's theory of evolution

(b) Microbial growth

(c) Evolution of population

UNIT—II

3. Describe the lytic and lysogenic life cycle of viruses. 15

OR

4. Write on any *two* of the following : 7½×2=15

(a) Bacteriophage

(b) Viroids and prions

(c) General structure of virus

UNIT—III

5. With suitable diagrams, explain the cell structure of a bacteria. Cite some economic importances of bacteria. 10+5=15

OR

6. Write on any *two* of the following : 7½×2=15

(a) Types of bacteria based on nutrition

(b) Asexual reproduction in bacteria

(c) Conjugation in bacteria

UNIT—IV

7. Describe the various methods of reproduction occurring in algae. Add a note on flagellation in algae. 12+3=15

OR

8. Write on any *two* of the following : 7½×2=15

   (a) Fritsch's classification of algae

   (b) Pigment system in algae

   (c) Economic importance of algae

UNIT—V

9. Describe the reproduction and life cycle of *Oedogonium* or *Chara* with suitable diagrams. 15

OR

10. Write on the following : 7½×2=15

    (a) Range of thallus organization in Rhodophyta

    (b) General characters of Cyanophyta

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