2022

(CBCS)

(1st Semester)

BOTANY

(Honours)

Paper Code : 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 *any* **five** Units

UNIT—I

1. *(a)* What are microorganisms? Write a note on microbial growth and metabolism. 2+13=15

Or

(b) Write short notes on the following : 7½+7½=15

(i) Three domains of life

(ii) Microbial nutrition

UNIT—II

2. *(a)* Write some characteristic features of virus. Explain the lytic and lysogenic cycle of virus. 3+12=15

Or

(b) Write short notes on the following : 7½+7½=15

(i) DNA virus

(ii) Viroids and Prions

UNIT—III

3. *(a)* Explain the mode of reproduction in bacteria. 15

Or

(b) Write short notes on the following : 7½+7½=15

(i) Bacterial cell structure

(ii) Economic importance of bacteria

UNIT—IV

4. *(a)* Write a note on the methods of reproduction in algae. 15

Or

(b) Write short notes on the following : 7½+7½=15

(i) Economic importance of algae

(ii) Thallus structure in algae

UNIT—V

5. *(a)* Write a detailed explanation about the mode of reproduction in Cyanophyta and Xanthophyta. 15

Or

(b) Write short notes on the following : 7½+7½=15

(i) *Nostoc*

(ii) *Vaucheria*

UNIT—VI

6. *(a)* Explain the morphology and life cycle of *Oedogonium.* 15

Or

(b) Write short notes on the following : 7½+7½=15

(i) General characteristics of Chlorophyta

(ii) Evolutionary significance of *Prochloron*

UNIT—VII

7. *(a)* Write the general features of Phaeophyta and Rhodophyta. 15

Or

(b) Write short notes on the following : 7½+7½=15

(i) Reproduction and morphology of *Ectocarpus*

(ii) Cell structure in Rhodophyta

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