

**TDC Odd Semester Exam., 2020
held in July, 2021**

BOTANY

(Honours)

(1st Semester)

Course No. : BOTH-101

**(History of Microbiology, Biodiversity of
Microbes and Concept of Biodiversity)**

Full Marks : 35

Pass Marks : 12

Time : 2 hours

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

Answer **five** questions, selecting **one** from each Unit

UNIT—I

1. (a) Discuss germ theory of disease. 4
(b) Describe briefly Pasteur's experiment disapproving spontaneous generation theory. 3

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(Turn Over)

2. (a) What is vaccination? Describe briefly discovery of vaccination process with special reference to the works of Edward Jenner and Louis Pasteur. 1+3=4
(b) State the differences between attenuated and killed vaccines. 3

UNIT—II

3. (a) Describe briefly fine structure of cell wall of Gram positive and Gram negative bacteria. 2+2=4
(b) Give the differences between prokaryotic and eukaryotic micro-organisms. 3
4. (a) State four differences between bacteria and archaea. 4
(b) Give the similarities between blue-green algae and bacteria. 3

UNIT—III

5. (a) Write a note on seven-kingdom concept. 3
(b) Describe briefly possible causes of mass extinction. 4
6. (a) What is remote sensing? 2
(b) Write a note on application of remote sensing. 5

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(Continued)

UNIT—IV

7. (a) Discuss economic importance of viruses. 3
(b) Write a note on structure of bacteriophage with suitable diagram. 4
8. (a) Why are viruses called absolute parasites? 2
(b) Describe briefly characteristics and types of viruses. 5

UNIT—V

9. (a) Write a note on economic importance of bacteria. 4
(b) Write a note on the different types of bacteria with diagram. 3
10. (a) What is genetic recombination? 1
(b) Write a note on genetic recombination in bacteria. 6

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