

No. of Printed Pages : 03

Roll No.

34266

B.Sc. (NEP-2020) EXAMINATION, 2025

(Second Semester)

B24-BTY-201

General Microbiology

Time : 3 Hours]

[Maximum Marks : 35

Before answering the question-paper, candidates must ensure that they have been supplied with correct and complete question-paper. No complaint, in this regard will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. **1** is compulsory. All questions carry equal marks.

1. Write short notes on the following : **1×7=7**

- (i) Lysogenic cycle
- (ii) Fermented foods

- (iii) Conjugation
- (iv) Growth curve
- (v) Fungi
- (vi) Acid fast staining
- (vii) Agar slants

Unit I

2. Discuss the Gram staining and endospore staining of microorganisms. 7
3. Discuss the contribution of Louis Pasteur, Edward Jenner and Robert Koch. 7

Unit II

4. Write a note on transformational and transduction mode of bacterial reproduction. 7
5. Discuss the following : 7
 - (a) Microbial nutrition
 - (b) Isolation of microorganisms

Unit III

6. Explain the following : 7
 - (a) Lytic and lysogenic cycle
 - (b) Chemical control of microorganisms
7. Differentiate between viruses and microbial cell along with examples. 7

Unit IV

8. Elaborate the functions and types of soil microorganisms. 7
9. Write notes on the following : 7
 - (a) Sewage composition and its disposal
 - (b) Bacterial pollutants of water

