

NS-3458(N)

B.Sc. (Biotechnology)

Examination, June-2022

MICROBIOLOGY

(B-104)

(New)

(B.Sc. Biotech.)

Time : Three Hours] [Maximum Marks : 50

Note : Attempt any **five** questions. **Each** question carries equal marks.

1. What do you mean by Pasteurization? Write down the Pasture's experiments in details. 10
2. What is Gram Staining? Differentiate between Gram Positive and Gram Negative Bacteria with suitable example. 10

3. Write short notes on any **two** of the following: 5 each
 - (a) Discovery of Microscope
 - (b) Concept of Sterilization
 - (c) Kind of Flagella
4. What are antibiotics? Describe commercial production of Streptomycin antibiotic. 10
5. Write down the industrial importance of microbes and their uses in dairy industry. 10
6. Discuss two diseases caused by protozoa, their symptoms and spread by insects. 10
7. What is infection? Describe any two pathogenic microorganism of food and their control measures. 10

NS-3458(N)/2

P.T.O.

8. Write short notes on any **two** of the following: 5 each

- (a) Replica Plating Technique
- (b) Strain improvement by Selection
- (c) Phosphate solubilising Bacteria

9. What do you mean by nitrogen fixation?
Discuss the importance of nitrogen fixation in agriculture. 10

10. Write short notes on the following: 5 each

- (a) Viral diseases of major crops
- (b) SCP