

[This question paper contains 2 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 8082

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Unique Paper Code : 2533012016

Name of the Paper : Microbial Diagnosis and Public Health Management

Name of the Course : **Microbiology**

Semester : Part-IV, Semester-VIII

Duration : 2 Hours

Maximum Marks : 60

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt any **five** questions. **All** questions carry equal marks.

Q1. Define the following terms citing suitable examples (any six):

2x6=12

- i. Saprozoonoses
- ii. Sensitivity
- iii. Negative predictive value
- iv. Cryptic Plasmid
- v. Pandemic
- vi. Birth rate
- vii. Serotyping

Q2. Write short notes on the following (any three):

4x3=12

- i. Nonrandomized Trials
- ii. VITEK
- iii. Antibigram Typing
- iv. Methods for Collection of Blood Samples

Q3. a. Differentiate between the following (any three):

3x3=9

- i. Endemic and Epidemic
- ii. Reservoir and Carrier
- iii. Anthroozoonoses and Amphixenoses
- iv. Morbidity and Mortality

P.T.O.

- b. Discuss the precautions for the sample collection by throat swab during the diagnosis of infectious disease. 3

Q4. a. State true or false for the following statements citing suitable reasons for your answer. 2x3=6

- i. Bacteriocins are usually active against closely related species of bacteria.
- ii. Metazoonoses require only an invertebrate host.
- iii. Live Attenuated Vaccine (LAV) is better than inactivated vaccine in providing immunity.

- b. Explain the principle and procedure of phage typing with the help of a suitable diagram. 6

Q5. a. Discuss the key aspects of disaster management. 6

- b. How MALDI-ToF can be used for the identification of a pathogenic microorganism? 6

Q6. a. Describe the effects of water pollution on human health. 4

- b. Differentiate between the incidence and prevalence of a disease with the help of suitable examples. 4

- c. What do you understand by the concept of one health? 4