Microbiology

Model Question Paper (Theory)

MBT-101 Introductory Microbiology,Microbial Techniques and Biology of Microorganisms

Paper: I SEMESTER -1

Time:3Hrs Max.Marks:75

Part-A

Answer any FIVE questions 5x5=25

1. Edward Jerner

2. General characteristics of micro algae

3. Principle and procedure of autoclaving.

4. Differences between Streak plate method &Pour plate method.

5. Structure of flagellum.

6. Lyophilization.

7. Applications of Microbiology.

8. Structure of HIV.

Part-B

Answer ALL the questions 5x10=50Marks

9. a) Discuss the various contributions of Robert Koch and Winogradsky?

OR

b) Discuss the controversy over spontaneous generation vs. Biogenesis theory?

10. a) Define Differential staining? Explain the any two methods of differential staining methods

OR

b) Write about Whittaker's Five kingdom concept and Three domain concept of Carl Woese Classification?

11. a) Explain in Detailed about physical methods of sterilization?

OR

b) Define Disinfection ? Explain the following chemical methods of sterilization

1)Alcohols 2)Halogens 3)Aldehydes

12. a) Write an essay on various methods of Preservation Techniques?

OR

b) Explain the following methods used to isolate Bacteria in pure culture

1)Streak plate 2)Spread plate 3)Micro manipulator

13. a) Give in detail the structures of Gram positive and Gram negative cell walls?

OR

B) Explain the Structure and multiplication of Bacteriophage?

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Model Question Paper (Practical)

Paper: I SEMESTER -1

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Time: 3Hrs Max.Marks:75

1) Identify the given culture and differentiates organisms by using

Gram Staining Method 1x15=15M

2) Enumeration of bacterial numbers by serial dilution 1x10=10M

3) Preparation of culture media: Solid 1x10=10M

4) a) Streak Plate Method 1x4=4M

b) Autoclave 1x4=4M

c) objective lenses 1x4=4M

d)Principle and procedure for Spore Staining method 1x8=8M

5)Viva and Record 2x10=20M