

**B.Sc. MICROBIOLOGY
SECOND SEMESTER
MICROBIAL DIAGNOSTICS
BMB-202**

**SET
A**

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 1hr. 30 mins.

Full Marks: 35

Time: 15 mins.

(Objective)

Marks: 10

Choose the correct answer from the following:

1 × 10 = 10

1. RFLP involves.....
 - a. Restriction enzymes
 - b. Ligases
 - c. Polymerases
 - d. Nucleotides
2. Molecular marker rely on.....
 - a. DNA
 - b. RNA
 - c. Lipids
 - d. Vitamins
3. Idiotype is the variation in..... region of antibody.
 - a. Hinge
 - b. Constant
 - c. Base
 - d. Variable
4. Disease detection is most authentic by.....
 - a. Biochemical markers
 - b. Physical markers
 - c. Cytological markers
 - d. Molecular markers
5. MIC is.....
 - a. Maximum Inhibitory Concentration
 - b. Minimum Inhibitory Concentration
 - c. Maximum/Maximum Inhibitory Concentration
 - d. All are correct
6. Which of the following immunoglobulins makes the largest percentage in breast milk?
 - a. IgM
 - b. IgD
 - c. IgG
 - d. IgA
7. Antibodies are:
 - a. Prostaglandins
 - b. Steroids
 - c. Lipoproteins
 - d. Glycoproteins
8. Which of the following is used in electron microscope?
 - a. Electron beams
 - b. Magnetic fields
 - c. Light waves
 - d. Electron beams and magnetic fields
9. Which among the following helps us in getting a three-dimensional picture of the specimen?
 - a. Transmission Electron Microscope
 - b. Scanning Electron Microscope
 - c. Compound Microscope
 - d. Simple Microscope

10. Electron Microscope can give a magnification up to.....
- a. 400,000X
 - b. 100,000X
 - c. 15000X
 - d. 100X

(Descriptive)

Time : 1 hr. 15 mins.

Marks : 25

[Answer question no.1 & any two (2) from the rest]

- | | |
|--|--------|
| 1. Explain agar well diffusion method. | 5 |
| 2. What is marker? Explain the reactions and role of PCR medical diagnosis. | 3+7=10 |
| 3. What is fingerprinting? Explain plasmid printing highlighting its role in strain detection. | 3+7=10 |
| 4. Write short notes on:
a) Radio immune assay
b) Electron microscopy | 5+5=10 |
| 5. Describe in brief epitope design and its applications. | 5+5=10 |

= = *** = =