2024/05

SET B

B.Sc. BIOTECHNOLOGY
SECOND SEMESTER
MEDICAL DIAGNOSTICS
BBT-202

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 1hr. 30 mins. **Full Marks: 35**

Objective

Time: 15 mins. **Marks: 10**

Choose the correct answer from the following: ***1×10=10***

1. Which of the following immunoglobulins makes the largest percentage in breast milk?
   a. IgM b. IgD
   c. IgG d. IgA

2. Antibodies are:
   a. Prostaglandins b. Steroids
   c. Lipoproteins d. Glycoproteins

3. Which of the following is used in electron microscope?
   a. Electron beams b. Magnetic fields
   c. Light waves d. Electron beams and magnetic fields

4. 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

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

6. RFLP involves……
   a. Restriction enzymes b. Ligases
   c. Polymerases d. Nucleotides

7. Molecular marker rely on……
   a. DNA b. RNA
   c. Lipids d. Vitamins

8. Idiotype is the variation in…….. region of antibody.
   a. Hinge b. Constant
   c. Base d. Variable

9. Disease detection is most authentic by……..
   a. Biochemical markers b. Physical markers
   c. Cytological markers d. Molecular markers

10. MIC is.....
    a. Maximum Inhibitory Concentration
    b. Minimum Inhibitory Concentration
    c. Maximum/Maximum Inhibitory Concentration
    d. All are correct

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(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: 5+5=10
   a) Radio immune assay
   b) Electron microscopy
5. Describe in brief epitope design and its applications. 5+5=10

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