BLDE (DEEMED TO BE UNIVERSITY)
M.Sc. Allied Health Sciences (Medical Biochemistry)

[Time: 3 Hours]   [Max.Marks:80]

IV SEMESTER
PAPER – I (Molecular Biology and Genetics)
QP CODE: 9056

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

Long Questions   **10X3 = 30 Marks**

1. Explain the process of DNA Replication and add a note on replication fork.

2. What are the types of post-translational modification? Explain with suitable examples.

3. Describe the cell cycle- stages, checkpoints. And add a note on mutagens.

Short Essays: **5 X 10 = 50 Marks**

4. Restriction endonucleases.

5. Apoptosis.

6. Mitochondrial DNA.

7. Gene rearrangement.

8. Hormone response elements.

9. What are chaperones? Explain with examples.

10. "t" RNA- structure and functions.

11. Define operon. Explain the lac operon concept.

12. Wobble hypothesis

13. Vectors in gene therapy.

BLDE (DEEMED TO BE UNIVERSITY) Jan-2023.

M.Sc. Allied Health Sciences (Medical Biochemistry)

[Time: 3 Hours]   [Max.Marks:80]

IV SEMESTER
PAPER – II (Clinical Biochemistry and Biochemical Techniques)
QP CODE: 9057

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

Long Questions   **10X3 = 30 Marks**

1. Explain the technique of Electrophoresis and add a note on the different types.

2. Define cloning. Discuss the applications of gene cloning in diagnosis and management of disease.

3. Polymerase chain reaction (PCR): Types and Applications.

Short Essays: **5 X 10 = 50 Marks**

4. Beer-lambert's law and applications.

5. Single-Strand Conformation Polymorphism (SSCP)

6. Ion selective electrodes: principle and applications.

7. Southern blotting.

8. Principle of dry chemistry system of diagnosis.

9. Affinity chromatography.

10. Working principle of pH meter.

11. Monoclonal antibodies.

12. Important uses of transgenic animals.

13. Define and list the uses of ELISA.