

B.Sc. Semester - 1 (NEP-2020) Examination**OCT/NOV-2025****BIT : Introduction to Biotechnology (Major-2)****Time: 2:00 Hours****Marks:50****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

Que.1 Define Biotechnology. Explain various application of Biotechnology in detail. (10)

OR

Que.1 Explain in detail about recombinant DNA technology and its application in Biotechnology world

Que.2 Draw a label diagram of animal cell and elaborate function of each organelle present in cell. (10)

OR

Que.2 Describe in detail about ultrastructure and function of prokaryotic cell.

Que.3 Draw a label diagram of Mitochondria and explain in detail. (10)

OR

Que.3 Explain in detail about structure, function and chemical composition of Ribosomes.

Que.4 Explain in detail about somatic cell division. (10)

OR

Que.4 Explain in detail about overview of cycle and its regulation.

Que.5 Write a short note (10)

(A) Evolution of cell and cell theory

(B) Mitochondria

OR

(A) Nucleus

(B) Meiosis
