

H-55031 Seat No. _____
M. Sc. (Part - I) Examination
April / May – 2003
Biotechnology : Paper - II
(Cell Biology & Molecular Biology)

Time : 3 Hours]

[Total Marks : 75

Instruction : All questions carry **equal** marks.

- Q. 1 Give a detailed account on the ultrastructure and function of mitochondria.
- or**
- Q. 1 Write an account on structure and functions of plasma membrane.
- Q. 2 Describe in detail the regulation of cell cycle.
- or**
- Q. 2 Explain :
- (a) Light reaction in photosynthesis
(b) Mechanism of solute adsorption
- Q. 3 Write an account on DNA replication in eukaryotes.
- or**
- Q. 3 Explain :
- (a) Okazaki fragments
(b) Intron and exon concept in eukaryotes
- Q. 4 Give a detailed account on factors involved in RNA transcription.
- or**
- Q. 4 Give an account on :
- (a) Inhibition of DNA and RNA biosynthesis
(b) Reverse transcriptase
- Q. 5 Write an account on PCR and its importance in biotechnology.
- or**
- Q. 5 Explain the control of gene expression in prokaryotes.
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