55007

M. Sc. (Part - I) Examination
April / May – 2003

Zoology : Paper - I
(Cell Biology, Genetics & Radiation Biology)

Time : 3 Hours] [Total Marks : 100

NB: All questions carry equal marks.
All questions are compulsory.
Illustrate your answers with neat diagrams wherever necessary

   b). Topography of Cytoskeleton

   OR

1. Describe ultrastructure and functions of:
   a). Peroxisome
   b). Mitochondria

2. Write an account on:
   a). Events in Cell cycle
   b). Multiple alleles

   OR

2. Write an account on:
   a). Solenoid model
   b). Linkage and crossing over

3. Describe:
   a). Transposable elements
   b). Spontaneous mutation

   OR

3. Describe:
   a). Methods to construct recombinant DNA
   b). Events in transcription and RNA splicing

4. Describe:
   a). Types of non-ionising radiation
   b). Effect of radiation on the skin, bone and immune function

   OR

4. Discuss:
   a). Radiation is a cause and cure of cancer
   b). Methods for measurement of Radiation

5. Write short notes on any three of the following:
   a). Optical aberrations
   b). 70 S Ribosome
   c). Y – chromosome specific genes
   d). C – value paradox
   e). Enzymes in DNA replication
   f). Radioactive decay and half life