

M.Sc. - I (Zoology) (CBCS Pattern) Semester-I
PSCZOOT03 - Paper-III - Cell Biology and Genetics

P. Pages : 1

Time : Three Hours



GUG/S/25/11177

Max. Marks : 80

-
- Notes :
1. All questions are compulsory.
 2. All questions carry equal marks.
 3. Draw well labelled diagram wherever necessary.

1. Describe the structure, model and function of plasma membrane. 16

OR

- a) Structural organization and functions of Mitochondria.
- b) Mitosis.

2. Describe signal transduction pathways. 16

OR

- a) Cell surface Receptor proteins.
- b) Cell adhesion molecules.

3. Describe dihybrid Mendelian inheritance. 16

OR

- a) Linkage.
- b) Types of mutation.

4. Describe extra chromosomal inheritance with reference to mitochondria. 16

OR

- a) Recombination in bacteria and gene mapping.
- b) Pedigree analysis.

5. Attempt the following. 16

- a) Microtubules.
- b) Oncogenes.
- c) Polygenetic traits.
- D Transversion.
