

M.SC. (Zoology) First Semester Old
ZOO-03 - Cell Biology and Genetics Paper-III

P. Pages : 1

Time : Three Hours



GUG/W/18/2196

Max. Marks : 80

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

1. Describe the structure and function of cell membrane. **16**

OR

Write notes on.

- a) Mitochondria.
- b) Microfilament.

2. Explain the detailed on signal transduction pathway. **16**

OR

Write notes on.

- a) Cancer.
- b) Hormone and their receptor.

3. Write an account of mutation. **16**

OR

Write notes on.

- a) Linkage and crossing over.
- b) Dihybrid inheritance.

4. Give an account of structural and numerical alternation of chromosomes. **16**

OR

Write notes on

- a) Inheritance of mitochondrial genes.
- b) Recombination in Bacteria.

5. Attempt the following. **16**

- a) Mitosis.
- b) Secondary messenger.
- c) Sex linkage.
- d) Conjugation.
