

M.Sc. (Part - I) (Zoology) (NEP Pattern) Semester-I  
**NEP-83 / 01MSCZO03 - Paper-III : Cell Biology and Genetics**

P. Pages : 1

Time : Three Hours



**GUG/W/23/15145**

Max. Marks : 80

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1. Structural organization of mitochondria and its function. 16
- OR**
- a) Active transport. 8
- b) Microtubules and their rule. 8
2. Give an account on tumor suppressor genes. 16
- OR**
- a) Receptor protein. 8
- b) Primary and secondary messenger system. 8
3. Give detail account on codominance and incomplete dominance. 16
- OR**
- a) Mutation types. 8
- b) Sex linkage. 8
4. Write an essay on extra chromosomal inheritance. 16
- OR**
- a) Gene mapping. 8
- b) Pedigree analysis. 8
5. Write short notes-
- i) Osmosis. 4
- ii) Gap junctions. 4
- iii) Sex linkage. 4
- iv) Karyotypes. 4

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