

B.Sc. (CBCS Pattern) Semester-II  
**USZOT04 - Zoology Paper-II - Genetics and Evolution**

P. Pages : 1

Time : Three Hours



**GUG/W/24/11595(S)**

Max. Marks : 50

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

- |           |   |                         |
|-----------|---|-------------------------|
| <b>1.</b> | Write an essay on laws of genetics.                               | <b>10</b>               |
|           | <b>OR</b>   |                         |
|           | a) Sex linkage in man.  | <b>5</b>                |
|           | b) Kappa particles in Paramecium.                                 | <b>5</b>                |
| <b>2.</b> | Describe crossing over and detail mechanism of crossing over.     | <b>10</b>               |
|           | <b>OR</b>   |                         |
|           | a) Down's Syndrome.   | <b>5</b>                |
|           | b) Spontaneous Mutation.  | <b>5</b>                |
| <b>3.</b> | Describe in detail different types of fossils.                    | <b>10</b>               |
|           | <b>OR</b>   |                         |
|           | a) Oparin's Theory.   | <b>5</b>                |
|           | b) Darwinism.   | <b>5</b>                |
| <b>4.</b> | Describe the mechanism of isolation.                              | <b>10</b>               |
|           | <b>OR</b>   |                         |
|           | a) Macro-Evolutionary principles.                                 | <b>5</b>                |
|           | b) Role of Extinction in Evolution.                               | <b>5</b>                |
| <b>5.</b> | Write two or three line on each of the following <b>any ten</b> . | <b>10</b>               |
|           | i) Epistasis  | ii) True equine         |
|           | iii) Deletion   | iv) Homing instinct     |
|           | v) Old wood   | vi) Species recognition |
|           | vii) Ebionts  | viii) Polyploids        |
|           | ix) Coacervates   | x) Co-dominance         |
|           | xi) Artificial selection  | xii) Gene locus         |

\*\*\*\*\*