

B.Sc.- I (CBCS Pattern) Semester-I  
**USZOT02 - Zoology Core Paper-II - Cell Biology**

P. Pages : 1

Time : Three Hours



**GUG/W/24/11565**

Max. Marks : 50

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

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|-----------|--|-------------------------|
| <b>1.</b> | Write an essay passive and Active transport across the membrane. | <b>10</b>               |
|           | <b>OR</b>  |                         |
|           | a) Fluid Mosaic Model.   | <b>5</b>                |
|           | b) Prokaryotic cell.   | <b>5</b>                |
| <b>2.</b> | Give an account on giant chromosomes.                            | <b>10</b>               |
|           | <b>OR</b>  |                         |
|           | a) Nucleosome  | <b>5</b>                |
|           | b) Ultrastructure of nucleus.                                    | <b>5</b>                |
| <b>3.</b> | Describe ultrastructure and functions of mitochondria.           | <b>10</b>               |
|           | <b>OR</b>  |                         |
|           | a) Oxidative phosphorylation.                                    | <b>5</b>                |
|           | b) Functions of endoplasmic Reticulum.                           | <b>5</b>                |
| <b>4.</b> | Write an essay on mitosis.                                       | <b>10</b>               |
|           | <b>OR</b>  |                         |
|           | a) Polymorphism in lysosomes.                                    | <b>5</b>                |
|           | b) Three dimensional model of 70S ribosome.                      | <b>5</b>                |
| <b>5.</b> | Write four or five lines on the following <b>any ten</b> .       | <b>10</b>               |
|           | i) Osmosis   | ii) Unit membrane       |
|           | iii) Active transport  | iv) Chromatid           |
|           | v) Autosomes   | vi) Kinetochore         |
|           | vii) Cisternae   | viii) SER               |
|           | ix) ETS  | x) Synaptonemal complex |
|           | xi) 5S RNA   | xii) Polyribosome       |

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