

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

P. Pages : 1

Time : Three Hours



**GUG/W/22/11565**

Max. Marks : 50

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1. Describe passive transport in plasma membrane. 10
- OR**
- a) Fluid Mosaic model of plasma membrane. 5
- b) Explain active transport with the help of  $\text{Na}^+ - \text{K}^+$  pump. 5
2. Describe Ultra structure of nucleus. 10
- OR**
- a) Nucleolus. 5
- b) Polytene chromosome. 5
3. Explain electron transport mechanism. Add a note on oxidative phosphorylation. 10
- OR**
- a) Ultrastructure of mitochondria. 5
- b) Structure of Golgi complex. 5
4. Describe in detail the process of Meiosis. 10
- OR**
- a) Lake's model of ribosome. 5
- b) Structure and polymorphism of lysosome. 5
5. Write three to four lines about following **any ten**. 10
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|------------------------|-------------------------|
| i) Protoplasmic theory | ii) Intrinsic protein   |
| iii) Phagocytosis      | iv) Chromonemata        |
| v) Nuclear pore        | vi) Telomere            |
| vii) ATP synthase      | viii) Annulate Lamellae |
| ix) Cis face of Golgi  | x) 70s ribosome         |
| xi) Kinetochore        | xii) Centromere         |

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