

14/12/23



School of Biological Sciences (SOBS)  
Doon University  
Dehradun, Uttarakhand  
Question Paper: End-Semester Examination  
Session: July 2023 – Dec 2023

**B.Sc. Biological Sciences**

**Course: Cell Biology I**

**Course Code: BSC202**

**Total Marks: 30**

**Maximum Time: 2:00 Hrs**

**PART I Give the answers to following questions:**

**(Marks:  $1 \times 6 = 6$ )**

- Define the primary active transport.
- What is the role of lysosome in fertilization?
- Draw the well labelled diagram of homologous chromosomes.
- What are the role of cholesterol in cell membrane?
- Define the cell theory with suitable examples?
- Draw the well labelled diagram of mitochondria.

**PART II Give the answers to any Four questions:**

**(Marks:  $3 \times 4 = 12$ )**

- Enlist the functions of endoplasmic reticulum.
- Write down the short notes on extracellular matrix?
- Differentiate the normal cells and cancer cells with suitable diagram.
- Distinguish the microfilaments and microtubules with suitable diagram.
- Write down the comments on nucleus structure and functions?

**PART III Give the answers to Two questions:**

**(Marks:  $6 \times 2 = 12$ )**

- Emphasize the molecular basis of regulation of cancer cell.
- Explain the architecture and compartmentalization of eukaryotic cell.
- Give an account of protein sorting associated with the Golgi complex.



$$\frac{32+2=34}{}$$