

Paper Id:

Roll No.

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B PHARM
(SEM VIII) THEORY EXAMINATION 2022-23
CELL AND MOLECULAR BIOLOGY

Time: 3 Hours

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Total Marks: 75

Note: Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt all questions in brief. <https://pharmacyindia.co.in/> **10 x 2 = 20**

- Differentiate between prokaryotic and eukaryotic cell.
- Define transgenic animals.
- Classify various types of RNA. <https://pharmacyindia.co.in/>
- Enlist the function of tRNA and rRNA.
- Define centromere and genome.
- What are chaperones?
- Define genetics. <https://pharmacyindia.co.in/>
- Write the functions of microtubules.
- Enlist types of G-protein involved in cell transduction signaling.
- Differentiate between active and passive transport across cell membrane.

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SECTION B

2. Attempt any two parts of the following: **2 x 10 = 20**

- Draw a well labelled diagram of eukaryotic cell. Enumerate the functions of Golgi bodies and Endoplasmic reticulum. <https://pharmacyindia.co.in/>
- Explain the cell cycle in detail. Highlight the check points in cell cycle.
- Discuss the GPCR mechanism of cell signaling.

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SECTION C

3. Attempt any five parts of the following: **5 x 7 = 35**

- Explain the types of cellular reproduction in prokaryotes and eukaryotes.
- Summarize the process of protein synthesis. <https://pharmacyindia.co.in/>
- Discuss the fluid mosaic model of cell membrane.
- Write a detailed note on structure and types of proteins.
- Discuss the Central Dogma of molecular biology. <https://pharmacyindia.co.in/>
- Describe the different phases of mitosis and their significance in cell division.
- Discuss the types and function of protein kinases.

