

QP Code: 828006

Reg. No.....

**Eighth Semester B. Pharm Degree Regular/Supplementary  
Examinations March 2025  
Cell and Molecular Biology  
(2017 Scheme)**

**Time: 3 Hours**

**Max. Marks: 75**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw diagrams wherever necessary*

**Essays**

**(2x10=20)**

1. Describe the Cellular reproduction in brief. What is chemical foundation. Write its significance.
2. Explain briefly the molecular structure of RNA. Write the steps involved in translation process.

**Short Notes**

**(7x5=35)**

3. Explain briefly the structure and functions of Golgi complex.
4. Describe the applications of cellular and molecular biology.
5. Write a note on the properties of amino acids.
6. Explain protein kinases
7. Explain briefly about genome sequencing.
8. What is Cell cycle analysis
9. Describe cAMP and IP<sub>3</sub>/DAG pathway.

**Answer Briefly**

**(10x2=20)**

10. What are the pyrimidines of gene
11. Describe in short about the subunits of ribosomes.
12. Write about binary fission.
13. What is Reverse transcription
14. Define Chaperones and explain their significance.
15. Define transgenic animals and list any one of their applications
16. What is the importance of stem cells
17. Define Autocrine signalling.
18. Define Ion Channel receptor. Write its examples.
19. What is the role of phosphatases

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