

QP Code: 828006

Reg. No.....

**Eighth Semester B. Pharm Degree Supplementary Examinations
November 2022
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. Explain the signaling pathways and functions of protein kinase.
2. Detail on cell cycle and various phases of cell cycles; note on significance of Mitotic cell division.

Short Notes

(7x5=35)

3. Write any two cytological techniques used in cell biology.
4. Explain the difference between prokaryotic and eukaryotic cells.
5. Describe the structure and function of Mitochondria.
6. Describe DNA replications and its enzymes.
7. Write a note on genetic codes.
8. Give an account on protein structure.
9. Explain how the P53 gene acts as a tumor suppressor.

Answer Briefly

(10x2=20)

10. What are the various membrane receptors.
11. Define transcription.
12. What are the functions of RNA.
13. Write the principle of DNA finger printing.
14. Define pinocytosis.
15. What are the check points involved in cellular functions.
16. Receptors involved in cell signals.
17. Define cellular reproduction.
18. Applications of cellular and molecular biology.
19. Describe the function of proteins.
