

THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

[BPHARM0422]

**APRIL 2022
(SEPTEMBER 2021 SESSION)**

Sub. Code: 2084

**B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)
PCI Regulation 2017 SEMESTER VIII
PAPER VIII – CELL AND MOLECULAR BIOLOGY
Q.P. Code: 562084**

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)

1. What is gene transfer? Discuss various methods for gene transfer in animal.
2. Define Receptor? Explain in detail about molecular pathway of GPCR.
3. Explain in detail about Protein synthesis in eukaryotes.

II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)

1. Write in detail about structure and function of mitochondria.
2. Write short note on ribosomal RNA and micro RNA.
3. Explain in detail about replication DNA.
4. Write the functions of the following a. Centromere b. Cell wall.
5. JAK-STAT pathways.
6. Write a note on Kinase enzyme linked receptor.
7. Write short note on Autosomes and Sex chromosome.
8. Write the difference between eukaryotes and prokaryotes.
9. Give short note on different phases of cell cycle and Check points.

III. Short answers on: Answer ALL questions. (10 x 2 = 20)

1. Monoclonal antibodies.
2. Meiosis.
3. Amino acid.
4. Types of cell signals.
5. Gel electrophoresis.
6. Tyrosine kinase receptor.
7. Telophase.
8. Cyclic AMP and GMP.
9. Plasmid.
10. Endoplasmic reticulum.
