

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

[LQ 0121]

JANUARY 2021

Sub. Code: 2984

(APRIL 2020 EXAM SESSION)

M.PHARMACY DEGREE EXAMINATION

SEMESTER-I (PCI New regulations 2016)

PHARMACOLOGY – MPL

PAPER IV – CELLULAR AND MOLECULAR PHARMACOLOGY

Q.P. Code : 262984

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Diagrammatically explain the intrinsic & extrinsic pathways of apoptosis.
b) How nuclear receptor intracellular signaling mechanism happens? Explain with pathway diagram.
2. a) State the principle, procedure, applications of recombinant DNA technology in the production of biologicals.
b) Add a note on proteomics.

II. Write notes on:

(7 x 5 = 35)

1. How CYP enzyme polymorphisms affects drug metabolism?
2. Name the methods of gene mapping. State the principle of any one method.
3. What are paracrine and autocrine signaling?
4. Write a note on viral vector.
5. How calcium transport across the cell membrane been measured?
6. Name different types of media used in the cell culture. Explain the procedures of cell culture.
7. What is cryopreservation? State the purpose and limitations of them.
