

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

[BPHARM 0921]

SEPTEMBER 2021
(FEBRUARY 2021 EXAM SESSION)

Sub. Code: 4266

B. PHARMACY DEGREE EXAMINATION
THIRD YEAR – (NON-SEMESTER)
PAPER VI – PHARMACEUTICAL BIOTECHNOLOGY
Q.P. Code: 564266

Time: Three hours

Answer ALL questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Diagrammatically represent a Prokaryotic cell Structure, Morphology and reproduction method of Bacteria.
2. a) Describe Microbiological Assay of Vitamins.(10)
b) Discuss in detail about Animal cell culture Media.(10)

II. Write notes on:

(8 x 5 = 40)

1. Explain the reproduction method of Yeast.
2. Explain in detail about sterilization by Radiation.
3. Describe Microbial Biotransformation of Steroids.
4. Explain production of Alcohol by fermentation method.
5. Discuss Plasmid and Cosmid Vector.
6. Discuss Antigen-Antibody reaction by precipitation.
7. Explain ELISA technique.
8. Summarize immobilization techniques with examples.

III. Short answers on:

(10 x 2 = 20)

1. Define Bacteria and Classify bacteria based on temperature.
2. What is Planktonic growth?
3. Define Transduction and Conjugation.
4. Define Bacteriophage.
5. Restriction Endonucleases.
6. Give example for killed bacterial Vaccine.
7. Write the types of Acquired Immunity.
8. Organism used for production of Citric acid.
9. Define Cell line.
10. Give the types of Hypersensitivity reactions.
