

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

[BPHARM 1022]

**OCTOBER 2022
(AUGUST 2022 EXAM SESSION)**

Sub. Code: 4266

**B.PHARMACY DEGREE COURSE (NON-SEMESTER EXAMINATIONS)
THIRD YEAR (Regulation 2009-2010)
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. Explain in detail about structure and reproduction of Bacteria.
2. Describe the types of Immunity with examples. Add a note on types of antigen-antibody reactions.

II. Write notes on:

(8 x 5 = 40)

1. Explain in detail about heat sterilization.
2. Discuss any two methods of evaluation of disinfectant.
3. Describe the Microbiological Assay of Antibiotics by diffusion method.
4. Explain in detail about Autoimmune disorders.
5. Describe the production of insulin by genetic engineering method.
6. Illustrate the production of Citric acid.
7. Explain the techniques of immobilization.
8. Summarize the applications of Animal cell culture.

III. Short answers on:

(10 x 2 = 20)

1. Write the stages involved in viral multiplication.
2. What is fumigation?
3. Give examples for sterilization by chemical agents.
4. Define Single cell proteins with examples.
5. What is transcription?
6. Give examples for killed bacterial Vaccine.
7. Define biosensor with examples.
8. What is Interferon?
9. Define Cell line.
10. Define Biological indicators with examples.
