

Rajiv Gandhi University of Health Sciences, Karnataka

Sixth Semester B. Pharm Degree Examination – 08-Jun-2023

Time: Three Hours

Max. Marks: 75 Marks

PHARMACEUTICAL BIOTECHNOLOGY

Q.P. CODE: 5027

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

All the Questions are compulsory

LONG ESSAYS

2 x 10 = 20 Marks

1. Explain different methods of enzyme immobilisation with their advantages and disadvantages.

OR

Describe the production of Hepatitis B vaccine. Write a note on plasmid vectors.

2. Describe the production of Penicillin by fermentation technology with a neat labelled flow chart.

SHORT ESSAYS

7 x 5 = 35 Marks

3. Describe the production and uses of lipase.

OR

Explain polymerase chain reaction with applications.

4. Outline the production of interferons by rDNA technology.

OR

What is biotransformation? List out the applications of microbial biotransformation.

5. Describe the applications and method for production of monoclonal antibodies.
6. Outline the general method for the preparation of live attenuated bacterial vaccines.
7. What are vaccines? Classify the types with examples.
8. Describe the Southern blot test with its applications.
9. Explain transduction and conjugation.

SHORT ANSWERS

10 x 2 = 20 Marks

10. List out any four applications of enzymes in medicine.
11. Write any four applications of immobilised enzymes.
12. What is cellular immunity?
13. What is protected fermentation?
14. What is immune suppression? Give two examples for immunosuppressive agent.
15. Write any four properties of Immunoglobulin G.
16. What are the conditions for storage of official vaccines?
17. What are Transposons?
18. Write any two applications of ELISA.
19. What do you mean by plasmid?
