

Rajiv Gandhi University of Health Sciences, Karnataka
Sixth Semester B. Pharm Degree Examination – 28-Nov-2022

Max. Marks: 75 Marks

Time: Three Hours

PHARMACEUTICAL BIOTECHNOLOGY
Q.P. CODE: 5027

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary.

2 x 10 = 20 Marks

LONG ESSAYS

1. What are biosensors? Explain the types with pharmaceutical applications.

OR

Write a detailed note on cloning vectors.

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

7 x 5 = 35 Marks

SHORT ESSAYS

3. Describe the production and uses of amylase.

OR

Explain the production of interferons by rDNA technology.

4. List out the applications of genetic engineering in medicine.

OR

Write a note on microbial biotransformation in production of steroidal medicinal agents.

5. List out different blood products and their applications.
6. Outline the general method for the production of live viral vaccines.
7. Write the role of lymphocytes in immunity.
8. Describe the Southern blot test. How does it differ from Western blot test?
9. Explain conjugation. Write its significance.

10 x 2 = 20 Marks

SHORT ANSWERS

10. List out any two applications of enzymes in medicine.
11. Write any four methods of immobilisation techniques.
12. Define immunity. List the types of immunity.
13. What are different types of aerators?
14. List out different types of hypersensitivity reactions.
15. Write any four properties of Immunoglobulin M.
16. Write the difference between vaccines and sera
17. What are Cosmid vectors?
18. Write any four applications of PCR.
19. Write any four differences between prokaryotic and eukaryotic DNA.
