

Rajiv Gandhi University of Health Sciences, Karnataka
Sixth Semester B. Pharm Degree Examination – 06-Nov-2024

Time: Three Hours

Max. Marks: 75

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 the production of Griseofulvin and Penicillin by fermentation technology with a neat labelled flow chart

OR

What are Biosensors? Explain the working of biosensors and write their applications in pharmaceutical industries

2. Describe the production of insulin by recombinant DNA technology

SHORT ESSAYS

7 x 5 = 35 Marks

3. Describe the production and uses of Vitamin B12

OR

Explain the basic structure of Immunoglobulin and its functions

4. Explain the production of interferons by rDNA technology

OR

Write a note on protein engineering

5. Describe the technique of polymerase chain reaction (PCR)
6. Classify vaccines giving examples. Write the difference between toxins and toxoids
7. Describe ELISA with its applications
8. Explain conjugation. Write its significance
9. Write a note on serum-immune blood derivatives

SHORT ANSWERS

10 x 2 = 20 Marks

10. List out any four advantages of Enzyme Immobilization
11. Enlist the different types of vectors used in genetic engineering
12. Write any four applications of PCR
13. Define immunity. List the types of immunity
14. Define immunoglobulins
15. What are cosmid vectors?
16. Define conjugation
17. Name four mutagenic agents
18. Write the source of organism and uses of griseofulvin
19. What are the conditions for storage of official vaccines?
