

Rajiv Gandhi University of Health Sciences, Karnataka
VIII Semester B. Pharm Degree Examination – 21-Jun-2024

Time: Three Hours

Max. Marks: 75 Marks

PHARMACEUTICAL PRODUCT DEVELOPMENT

Q.P. CODE: 5045

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary
All questions are compulsory

LONG ESSAYS

2 x 10 = 20 Marks

1. Classify surfactants and explain their mechanism of action
OR
Give a note on excipients used in preparation of semisolid dosage form
2. Enumerate on various excipients used for formulation of NDDS

SHORT ESSAYS

7 x 5 = 35 Marks

3. Write a note on quality control tests for plastic packaging materials
OR
Explain the regulations related to preformulation in pharmaceutical product development
4. Give a note on various solvents used in pharmaceutical product
OR
Emphasize on function and types of excipients used in tablet manufacturing
5. Give a note on excipients used in parenteral products
6. Write a note on QbD and give its application
7. Describe in detail on packaging materials for pharmaceutical product development
8. Write a note on evaluation of packaging materials
9. Explain directly compressible excipients

SHORT ANSWERS

10 x 2 = 20 Marks

10. Give the objectives of pharmaceutical product development
11. Mention the solubility enhancement techniques
12. Give the applications of cyclodextrins in formulations
13. Mention the types of experimental designs
14. Types of closures used in pharmaceutical packaging
15. Define product design and give its applications
16. Name the factors which affects solubility
17. Write about containers used in aerosols
18. Mention the evaluation parameters for containers
19. Write about types of packaging in pharmaceuticals
