

Rajiv Gandhi University of Health Sciences, Karnataka

VII Semester B. Pharm Degree Examination – 09-Nov-2023

Time: Three Hours

Max. Marks: 75 Marks

NOVEL DRUG DELIVERY SYSTEM

Q.P. CODE: 5032

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. Define controlled drug delivery systems. Explain the approaches for the controlled release formulations based on ion exchange and diffusion.

OR

Explain the principle and theories of bioadhesion. Explain transmucosal permeation.

2. What is Gastro-retentive drug delivery systems? Explain in detail about different approaches in designing the same.

SHORT ESSAYS

7 x 5 = 35 Marks

3. Explain the basic components of transdermal drug delivery systems.

OR

Explain formulation of buccal drug delivery system.

4. Define and classify the different types of microparticulate drug delivery systems.

OR

Write the applications of polymers in formulation of controlled drug delivery systems.

5. Discuss the factors affecting permeation of drug through the skin.
6. Write a note on osmotic pump.
7. Explain the concepts, advantages and disadvantages of nanoparticles.
8. Discuss the formulation of ocular drug delivery systems.
9. Write the application of intrauterine drug delivery systems.

SHORT ANSWERS

10 x 2 = 20 Marks

10. Write any two applications of controlled drug delivery systems.
11. Write the advantages and disadvantages of niosomes.
12. Write the two polymerisation techniques.
13. Enlist microencapsulation techniques.
14. What are the different layers of Skin?
15. Write the advantages of metered dose inhalers.
16. Define targeted drug delivery systems.
17. Write two important strategies for drug targeting.
18. Write various approaches to overcome ocular barriers for drug delivery.
19. What are contraceptive implants?
