

Rajiv Gandhi University of Health Sciences, Karnataka

VII Semester B. Pharm Degree Examination – 05-Jun-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 different approaches for the controlled release formulations based on diffusion and dissolution.

OR

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

2. What are Gastro-retentive drug delivery system. Explain the different approaches in formulating the same.

SHORT ESSAYS

7 x 5 = 35 Marks

3. Describe various methods to formulate microparticulate drug delivery systems.

OR

Write a note on formulation of buccal drug delivery system.

4. Explain the biological properties of drug relevant to controlled drug delivery system.

OR

Classify polymers used in controlled drug delivery systems.

5. Write the formulations of nasal spray.
6. Describe the any two formulations approaches of transdermal drug delivery system.
7. Give the structure and applications of liposomes.
8. Write barriers to ocular drug delivery (ODD) and classify approaches to overcome the same.
9. Classify the various intrauterine drug delivery systems.

SHORT ANSWERS

10 x 2 = 20 Marks

10. Applications of implants.
11. Advantages of meter dose inhalers.
12. Write the drug release mechanisms in microencapsulated products.
13. Write the role of saliva and mucus in mucosal drug delivery.
14. State basic components of transdermal drug delivery.
15. What are the advantages of nanoparticles in drug delivery system?
16. Give two examples biodegradable polymers.
17. Write the application of niosomes.
18. Picocarpine ocuserts.
19. Write the formulation of dry powder inhalers.
