

Rajiv Gandhi University of Health Sciences, Karnataka

IV Year B. Pharm Degree Examination - 17-Jan-2020

Time: Three Hours**Max. Marks: 70 Marks****ADVANCED INDUSTRIAL PHARMACY****(RS – 4)****Q.P. CODE: 2646**

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

LONG ESSAYS (Answer any Two)**2 x 10 = 20 Marks**

1. What is transdermal DDS? Explain the different formulation approaches for transdermal DDS.
2. Explain various types of validation. Discuss suitable validation procedure for mixing operation.
3. Describe the various physicochemical and pharmaceutical factors to be considered in selection of a drug candidate for controlled delivery formulations.

SHORT ESSAYS (Answer any Six)**6 x 5 = 30 Marks**

4. Define bioavailability. Explain how the bioavailability of poorly soluble drugs can be improved?
5. What is ocular DDS? Explain its advantages, disadvantages and ideal requirements for ocular drug delivery systems.
6. Explain concept, advantages and disadvantages of nanoparticles.
7. Explain the quality control tests conducted for rubber as pharmaceutical packaging materials.
8. Explain the objectives, role and structure of MHRA.
9. Explain variance and coefficient of variation with examples.
10. Define biostatistics. Explain different types of data distribution.
11. What are niosomes? Write its applications in targeted drug delivery systems.

SHORT ANSWERS**10 x 2 = 20 Marks**

12. Write the applications of microencapsulation.
13. Give examples for implant drug delivery systems.
14. Name any four general requirements for pilot plant construction.
15. Define sampling plan.
16. What are the advantages and disadvantages of glass as the pharmaceutical packaging material?
17. What are the objectives of USFDA guidelines?
18. What are therapeutic goods as per TGA guidelines?
19. Define central tendency distribution.
20. What are the quality guidelines as per ICH?
21. What are the advantages of implementing QbD?
