Rajiv Gandhi University of Health Sciences, Karnataka

IV Year B.Pharm Degree Examination - JAN-2019

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. Write the concept of controlled drug delivery systems. Explain the approaches for the Controlled release formulations based on dissolution.
2. Explain how the development of master formula records and batch manufacturing records play an important role in pilot plant scale up studies.
3. Define validation. Explain the significance of validation in pharmaceutical operations with respect to mixing and compression.

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

4. Define solid dispersions. Explain any one method of preparation of solid dispersions.
5. Explain concept, advantages and disadvantages of nanoparticles.
6. Explain concept, advantages and disadvantages of implants.
7. Explain glass as the container for the pharmaceutical packaging.
8. Explain the salient features of USFDA with respect to manufacture of finished products.
9. Define and explain average, mean, median and mode.
10. Define biostatistics. What is the significance of biostatistics in pharmacy?
11. Define bioavailability. Explain how the bioavailability of poorly soluble drugs can be improved.

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

12. Define half life and protein binding.
13. What are the ideal requirements for ocular drug delivery systems?
14. What is technology transfer?
15. Name different types of validation.
16. What are the advantages and disadvantages of plastic as the pharmaceutical packaging material?
17. What is cGMP? Write the significance of implementation of cGMP?
18. What are the objectives of TGA guidelines?
19. Define standard deviation.
20. What are the efficacy guidelines as per ICH?
21. What are the benefits of QbD?

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