

# Rajiv Gandhi University of Health Sciences, Karnataka

## IV Year B.Pharm Degree Examination - NOVEMBER 2015

**Time: Three Hours****Max. Marks: 70 Marks**

### PHARMACEUTICAL TECHNOLOGY AND BIOPHARMACEUTICS

#### (Revised Scheme – 3)

**Q.P. CODE: 2616**

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. Define bioavailability. Write its objectives. Explain the pharmacokinetic methods used to determine the bioavailability.
2. Define tablet coating. Enlist tablet-coating equipments. Explain the different steps involved in sugar coating of tablets. Write its advantages and disadvantages
3. Explain in detail about the formulation requirements and manufacturing of eyedrops.

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

4. Discuss the different factors affecting selection of dermatological vehicles
5. List out the ideal properties of shampoos. Add a note on conditioning agents used in shampoos.
6. Explain in brief the general formulation and filling of monophasic liquid orals
7. Define isotonic solution. Explain different methods to adjust isotonicity of a parenteral solution
8. Discuss the methods of preparation, handling and safety precautions of radiopharmaceuticals
9. List out the ideal properties of a propellant. Add a note on fluorinated hydrocarbon propellants used in aerosols
10. Explain pharmaceutical factors affecting drug absorption
11. Briefly explain in-process and final product quality control tests of soft gelatin capsules

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

12. What are positive and negative control tests in sterility testing of parenterals?
13. List out the ideal properties of face powder
14. Define base adsorption factor. Give its significance
15. Why is disintegrating agent not added in chewable tablets?
16. Differentiate between small and large volume parenterals
17. Differentiate between dry and wet granulation technique
18. Draw blood level curves following I.V and oral administration of drug
19. Numerical designation of propellants
20. Enumerate the defects in tablet coating.
21. List out the composition of vanishing cream with their functions.

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