

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Pharm Degree Examination – MAY 2017

Time: Three Hours

Max. Marks: 70 Marks

PHYSICAL PHARMACEUTICS (Revised Scheme 3)

Q.P. CODE: 2606

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 & derive an integrated equation for concentration terms half life & shelf life of first order reaction.
2. Define Rheology. Explain the Newtonian and Non-Newtonian Flow of Liquids with Suitable examples.
3. What are Adsorption Isotherms? Explain the different types of Adsorption Isotherms with examples. Add a note on Langmuir Adsorption Theory.

SHORT ESSAYS (Answer any Six)

6 x 5 = 30 Marks

4. Discuss Optical Rotation. Give its Applications.
5. Write a note on pharmaceutical Buffers.
6. Define Nernst Distribution Law. Give its applications.
7. Enlist and Explain the Factors affecting Stability of Pharmaceuticals.
8. What is Thixotropy? Give the methods for measurement of Thixotropy.
9. Write a note on Different Flow Properties of Powders & its measurement.
10. Discuss about the Structured Vehicles in Suspensions.
11. Explain the Metal Complexes with Examples.

SHORT ANSWERS

10 x 2 = 20 Marks

12. pH and its Applications.
13. Refractive Index.
14. Raoult's Law.
15. Apparent Zero Order Reaction.
16. Gibb's Adsorption Equation.
17. Steady State Diffusion.
18. Rheology.
19. HLB.
20. Gold Number.
21. β - Cyclodextrins.