

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.Pharm Degree Examination – August 2010

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. What are the methods by which drugs can degrade? How the drugs are stabilized against such degradation?
2. Define Newtonian and non-newtonian liquids. Explain the thixotropic properties of Non-Newtonian liquids
3. Classify organic molecular complexes giving one example of each and indicate the type of intermolecular interactions

SHORT ESSAYS (Answer any Six)

6 x 5 = 30 Marks

4. What is the role of dissociation constant in absorption of drugs?
5. Discuss the variation of mutual solubility of phenol water system
6. How do you carry out diffusion study?
7. Explain Cup and Bob viscometer
8. Define angle of repose. What is its significance?
9. What is wetting? Explain its significance in suspensions
10. Differentiate between lyophilic and lyophobic colloids
11. What are dilatant systems? Explain

SHORT ANSWERS

10 x 2 = 20 Marks

12. Give Henderson-Hasselbalch equation
13. Define half life of a reaction
14. What is yield value?
15. Define specific surface area
16. How do you prevent creaming in emulsion?
17. Define gold number
18. What are structured vehicles? Give examples
19. Define critical solution temperature
20. What do you mean by polarization?
21. What is a hysteresis loop?