

Rajiv Gandhi University of Health Sciences, Karnataka

Fourth Semester B. Pharm Degree Examination – 09-Jan-2020

Time: Three Hours**Max. Marks: 75 Marks****Physical Pharmaceutics - II****Q.P. CODE: 5015**

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. Describe the kinetic properties of colloids.
2. What is thixotropy? Explain the thixotropic properties of the plastic and pseudoplastic materials.
3. Define emulsions. Classify with examples. Write a note on instabilities of emulsions.

SHORT ESSAYS (Answer any Seven)**7 x 5 = 35 Marks**

4. How do you prepare lyophobic colloids? Give examples.
5. Give the equation and graphical representation of zero order, first order and second order reaction.
6. How do you determine bulk density?
7. Differentiate creaming and cracking of an emulsion
8. What are dilatant systems? Explain with examples.
9. Explain the concept of Donnan membrane equilibrium.
10. Discuss the physical and chemical factors influencing the chemical degradation of pharmaceutical product.
11. Give the importance of porosity and angle of repose.
12. How do you represent the particle size distribution graphically?

SHORT ANSWERS (Answer All)**10 x 2 = 20 Marks**

13. Why deflocculating agent is added in the determination of particle size by sedimentation method.
14. What is hysteresis effect?
15. Define hysteresis loop.
16. Differentiate Micro and Multiple emulsions
17. What do you mean by polydisperse system?
18. What is hydrolysis? Write any two preventive methods of the same.
19. What is $\pm dc/dt$?
20. Name two instruments used to measure turbidity.
21. What is 'Rheogram'?
22. Stoke's law
