

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B. Pharm Degree Examination – 03-Jan-2020

Time: Three Hours**Max. Marks: 70 Marks****PHYSICAL PHARMACEUTICS (RS - 4)****Q.P. CODE: 2630**

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 Adsorption isotherm. Explain Freundlich and Langmuir adsorption Isotherms.
2. Define the mechanism of thixotropy and give its applications in pharmacy.
3. Discuss the kinetic and optical properties of colloids.

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

4. Explain the effect of molecular association and dissociation of a solute on distribution law using relevant equation.
5. Explain the factors influencing the rate of reaction
6. Write a note on assembly of different diffusion apparatus
7. What are hydrophobic colloids? Describe any four preparation methods.
8. With the help of neat diagram explain principle and working of coulter counter method to determine the particle size
9. Explain organic molecular complexes with example.
10. Explain physical degradation of pharmaceuticals and its preventive measures.
11. Enumerate different methods of analysis of complex. Explain pH titration method of analysis.

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

12. Give any four applications of TEM analytical technique.
13. State Nernst Distribution law.
14. Define pseudo zero order reaction with example.
15. Enumerate methods to determine Surface tension.
16. Give diffusion equation and explain the terms.
17. Describe Rheogram and Rheopexy
18. Explain percent log normal distribution curve
19. What is void volume and porosity
20. What are clathrates?
21. What is gold number?
