

Second B.Pharm (Ayurveda) Degree Examinations, October 2016
Physical Pharmacy

Time: 3 Hours**Total Marks: 100**

- Answer all questions.

Essays:**(2x10=20)**

1. Define solubility. Discuss factors affecting the solubility of solids in liquids.
2. With relevant mathematical equation give the construction, working and applications of capillary viscometer.

Answer briefly:**(10x5=50)**

3. Applications of chemical kinetics in pharmacy.
4. Discuss the oxidative decomposition of pharmaceutical products and suggest the measures to prevent the same.
5. Discuss the factors influencing dissolution.
6. Explain elementary drug release.
7. Classify surfactants based on its application.
8. Define adsorption isotherm. State Freundlich adsorption equation.
9. Explain the working principles of coulter counter with the help of a labelled diagram.
10. Describe the process of dissolution of a drug from different dosage forms with the help of a flow diagram
11. Explain the causes for the instabilities of emulsion.
12. Describe the electrical properties of kinetics.

Short notes:**(10x3=30)**

13. Coacervation.
14. Characteristics of an ideal suspension.
15. Give the pharmaceutical applications of dialysis.
16. Bulk density and its applications.
17. Detergency.
18. Pharmaceutical applications of diffusion.
19. Pseudo first order reaction. Give two examples.
20. Half life equation for second order reaction.
21. Distribution law.
22. Time lag.
