

Second B.Pharm (Ayurveda) Degree Examinations, October 2015
Physical Pharmacy

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

- Answer all questions.

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

1. Explain the principle and method involved in the determination of particle size in a powder using Andresen apparatus
2. Explain the various steps involved in accelerated stability studies

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

3. Describe two methods for the evaluation of emulsion stability
4. Define suspension. Differentiate flocculated and deflocculated suspension
5. Solubility of liquid in a liquid with a suitable example
6. Concept of Donnan membrane equilibrium with a suitable example and equation
7. Working principle of cub and bob viscometer with diagram
8. Describe the air permeability method for the determination of surface area of a powder
9. Process of detergency
10. What is the importance of dissolution in drug absorption. Add a note on sink condition in dissolution
11. How polymers effect on gel formation
12. Compare the kinetics of first and pseudo first order reactions with example

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

13. Define molecularity with example
14. Importance of diffusion in pharmacy
15. Define wetting process. How is it useful in pharmacy
16. Define angle of repose. What are its application in pharmacy
17. Langmuir absorption isotherm
18. Define lyophilic colloid with example. How are they stabilized.
19. Phase inversion with example
20. Role of zeta potential in the formulation of suspension.
21. Define solvent, solute, solution
22. Newtonian flow with examples.
