Second Year B.Pharm Degree Supplementary Examinations - January 2016

PHARMACEUTICS – II
(Physical Pharmacy)
(2010 SCHEME)

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

- Answer all Questions.
- Write equations wherever necessary.

Essay   **(3x10=30)**

1. Enumerate the methods of complexation for enhancement of solubility.

2. What do you mean by accelerated stability studies. Narrate the construction of Arrhenius plot.

3. Deduce Newton's equation for flow. Draw the rheograms for Newtonian and non Newtonian materials with examples for each type.

Short notes   **(14x5=70)**

4. Electrical properties of interface.

5. Explain theory of sedimentation in suspension.

6. Narrate the construction and working of coulter-counter.

7. Discuss on Noyes-Whitney's equation for dissolution of drug particle.

8. How do you carry out dissolution studies.

9. Explain phase volume ratio.

10. Differentiate between flocculation, de-flocculation and controlled flocculation.

11. Define half life and how do you determine the same.

12. Explain the importance of Arrhenius equation in drug stability testing.

13. Explain different methods of preparation of emulsion.

14. Narrate the construction and working of falling sphere viscometer.

15. Define and explain Carr's index and Hausner ratio.

16. Explain dosage form design.

17. Mention the effect of temperature, light and solvent on reaction kinetics.

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