

Second Year B.Pharm Degree Supplementary Examinations - July 2015

**PHARMACEUTICS – II (2010 SCHEME)**  
**(Physical Pharmacy)**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

**Essay**

**(3x10=30)**

1. Define rheology. Explain Non-Newtonian system of flow
2. What is dissolution. Explain Noyes Whitney equation and apparatus used for dissolution study.
3. Define colloids and explain the properties of colloids

**Short notes**

**(14x5=70)**

4. Explain the electrical properties of liquid interface
5. Describe the theory of sedimentation
6. Describe the sedimentation parameters and classify the suspending agents
7. Explain the properties of Newtonian system of flow
8. Define shelf life and explain how accelerated stability studies are carried out
9. Explain the method for the determination of viscosity using cup and bob viscometer
10. Describe the effect of various factors on reaction kinetics
11. Describe the coulter counter method for the determination of particle size
12. Explain in brief the formulation of suspension
13. What is complexation and explain its significance with an example
14. What is HLB. Classify HLB and how it is calculated
15. Explain the different methods of preparation of emulsion
16. Explain the importance of phase – volume ratio in the formulation of emulsion
17. Explain the process adsorption at liquid and solid interface.

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