

PHARMACEUTICS – II (2010 SCHEME)
(Physical Pharmacy)

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Write equations wherever necessary.

Essay

(3x10=30)

1. What is surface tension. Describe a suitable method to determine surface tension
2. What is micromeritics. Classify various methods of particle size determination and explain any one method in detail
3. What are surfactants. Explain the HLB classification system and its application in pharmacy

Short notes

(14x5=70)

4. Explain the term interfacial tension and mention its importance in pharmacy
5. Briefly explain the theory of dissolution
6. Describe the principle of controlled flocculation in formulation of suspension
7. Explain the kinetic properties of colloids
8. What is solubilisation and explain it with an example
9. What is thixotropy and mention its importance
10. Describe the falling sphere viscometer for determination of viscosity
11. Explain the method determination of half life
12. What is complexation and mention its application in pharmacy
13. Derive an expression to determine the rate constant of first order of reaction
14. Explain in detail the spreading coefficient
15. Describe the law which governs the flow of liquids with an equation
16. Briefly explain the physical stability and preservation of emulsion
17. What is angle of repose and mention its applications
