

**Second Year B.Pharm Degree Supplementary Examinations
December 2017
PHARMACEUTICS – II
(2010 SCHEME)**

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Write equations wherever necessary.

Essay

(3x10=30)

1. What is surface tension. Describe any two methods for determination of surface tension.
2. Explain different types of non Newtonian systems and describe the falling sphere viscometer for the determination of viscosity
3. What is spreading coefficient and describe in detail the work of adhesion and work of cohesion in determining the same. Explain the HLB system for classification of surfactants.

Short notes

(14x5=70)

4. Ficks laws of diffusion.
5. Different factors affecting dissolution
6. Significance of drug complexation.
7. Sedimentation parameters.
8. Particle size determination by optical microscopy
9. Optical properties of colloids.
10. Half-life and equation for first order reactions.
11. Methods for determination of orders of reactions.
12. Coulter counter.
13. Thixotropic coefficient.
14. Desirable properties of suspension
15. Wetting agents in pharmacy.
16. Derived properties of powders
17. Emulsifying agents.
