

PHARMACEUTICS – II (2010 SCHEME)
(Physical Pharmacy)

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Write equations wherever necessary.

Essay

(3x10=30)

1. Define Newtonian and non-Newtonian liquids. Explain the thixotropic properties of non-Newtonian liquids.
2. Explain the various derived properties of powder.
3. Define colloids. Explain the kinetic, optical and electric properties of colloids.

Short notes

(14x5=70)

4. Mention the importance of dissolution and diffusion on absorption.
5. Derive an equation for the determination of surface tension of a liquid by capillary rise method.
6. Define shelf life and how do you determine it. Mention its significance.
7. What is plug flow and how do you overcome it.
8. Define angle of repose and mention its significance.
9. How do you determine order of a reaction.
10. Define specific surface area of a powder. How it can be determined.
11. Mention the principle and working of Ostwald's (capillary) viscometer.
12. What is wetting. Explain its significance in suspensions.
13. Differentiate between creaming and cracking in emulsion.
14. Describe Andreasen pipette method of analyzing the particle size.
15. Classify colloids with examples.
16. Explain various theories of emulsification.
17. Explain the Fick's laws of diffusion .
