QP CODE:203006

Second Year B.Pharm Degree Examinations - October 2012

PHARMACEUTICS - || (Physical Pharmacy)

Time: 3 Hours

Answer all Questions.

• Write equations wherever necessary.

(3x10=30)

Total Marks: 100

- 1. What are the factors by which drugs can degrade. How the drugs are stabilized against such degradation.
- 2. What is an adsorption isotherm. Explain Langmuir adsorption isotherm. Mention itslimitations.
- 3. Discuss the instability problems of emulsion and suggest the methods to overcome the same. Add a note on phase volume ratio.

Short notes

- 4. Explain coulter counter method used to determine particle size.
- 5. What is protein binding. Explain the kinetics of protein binding.
- 6. Define particle surface area. How do you determine the same.
- 7. Differentiate between lyophilic, lyophobic and association colloids.
- 8. Write a note on spreading co-efficient and surface free energy.
- 9. Define bulkiness and mention its significance.
- 10. Differentiate between a single point and multi point viscometer with examples.
- 11. Explain the working of dissolution test apparatus
- 12. Explain frequency distribution curve for particle size.
- 13. What do you mean by yield value and what are the causes for yield value.
- 14. Explain cup and bob viscometer.
- 15. Define HLB value and mention the methods for its estimation.
- 16. Define thixotropy and mention its application in pharmacy.
- 17. Explain Fick's law of diffusion with appropriate equation

Essay

(14x5=70)