Subject Code: CEU12

M.Pharmcy - I Semester Regular/Supplementary Examinations, April - 2012

PHYSICAL PHARMACEUTICS
(Pharmaceutics)

Time: 3 Hours **Max Marks: 60**

Answer any FIVE questions. All questions carry EQUAL marks.

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1. Define solid dispersion, classify and explain various techniques involved in preparation of solid dispersion.

2. a. Define compression and consolidation. Explain the physics and steps involved in process of compression and consolidation.
   b. Give short notes on the force-volume relationship and Heckels plot.

3. a. What are non-electrolytes and explain the solubilization of non-electrolytes.
   b. Give short notes on the use of solid state manipulation and surfactants in solubility of drugs.

4. a. Enumerate the theory of adsorption and crystal growth mechanism in dispersive systems.
   b. Explain in details the factors governing the stability of emulsions and suspensions.

5. a. Define Rheology. Classify and explain different types of flow behavior.
   b. List out the various instruments used for measurement of viscosity and explain any two.

6. a. Classify the polymers used in the pharmaceutical formulation with examples and applications.
   b. Write in detail about the biodegradable polymers with examples.

7. Give a short note on following:
   a. Complex order kinetics
   b. Freeze-thaw method
   c. Drug decomposition by Hydrolysis with suitable example.

8. a. Discuss the principle and methodology of Differential Scanning Colorimeter.
   b. Write a brief account on Bragg's equation and its application.

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