

Subject Code: PCE31B/[R13]

M. Pharm I Semester Regular Examinations, March, 2014

ADVANCED PHYSICAL PHARMACEUTICS

(Common to Pharmaceutics and Pharmaceutical Technology)

Time: 3 Hours

Max Marks: 60

**Answer any FIVE questions
All questions carry EQUAL marks**

- 1 a. Differentiate between solid solution and solid dispersion 6 M
b. Describe the different methods for the determination of particle size 6 M
2. Write about the following (6+6) M
 - a. Heckel plots
 - b. Crushing strength of tablet
3. Write about the methods of solubility enhancement by complexation and its advantages and limitations. 12 M
4. Describe the theory involved in rheology. 12 M
5. Write in detail about accelerated stability testing of dosage forms. 12 M
6. Write about the kinetics of decomposition reaction of drug substances and the methods of stabilization. 12 M
7. Explain the importance XRD and DSC in characterization of drug molecules with suitable examples. 12 M
8. a. Write about the mechanisms of crystal growth. 6 M
b. Explain in detail about stability problems of emulsions and suspensions. 6 M
