

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharmacy Sem-II Examination June 2010

Subject code: 220002

Subject Name: Pharmaceutics - II

Date: 16/ 06 /2010

Time: 02.30 pm – 05.30 pm

Total Marks: 80

**Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1**
- (a) Describe the factors affecting the process of size reduction. **07**
  - (b) Discuss the various theory to estimate the energy required for size reduction process **06**
  - (c) What is Angle of Repose? Give its significance. **03**
- Q.2**
- (a) Describe standards of sieve. How are powders are classified according to size as per Indian Pharmacopeias? **06**
  - (b) Describe construction, working and uses of fluid energy mill. **05**
  - (c) Describe construction and working of cyclone separator. **05**
- Q.3**
- (a) Explain terms with examples, positive, negative and neutral mixture. **06**
  - (b) Discuss the factors which controls the solid – solid mixing, **05**
  - (c) Give mechanisms of solid- solid and liquid – liquid mixing **05**
- Q.4**
- (a) Describe construction, working and uses of triple roller mill. **06**
  - (b) Explain crystal forms and crystal habits with suitable example. **05**
  - (c) Discuss the factors that affect the formation and growth of crystal. **05**
- Q.5**
- (a) Describe the miers super saturation theory of crystallization. What are the limitations of the miers theory? **06**
  - (b) With labeled diagram of Swenson-Walker crystallizer, Explain its working. What are its advantages over other crystallizer? **05**
  - (c) What is polymorphism? Give its examples. **05**
- Q. 6**
- (a) Enumerate solvents employed for vegetable drugs. Compare them. **06**
  - (b) With the help of a labeled diagram, describe the soxhlet extractor for continuous hot extraction. **05**
  - (c) Discuss the role of lubricants in tablet formulation. **05**
- Q.7**
- (a) Describe different devices available for measurement of pressure. **06**
  - (b) What are safety precautions to be observe in pharmacy laboratory? **05**
  - (c) Discuss the factors affecting strength of compressed tablets. **05**

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