

GUJARAT TECHNOLOGICAL UNIVERSITY**Diploma Pharmacy First Year Examination May 2010****Subject code:410001****Subject Name: Pharmaceutics-I****Date: 19 / 05 / 2010****Time: 11.00 am – 02.00 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) What is size reduction? Give the objectives of size reduction. Discuss the factors affecting size reduction process. **06**
- (b) Write a note on packaging of pharmaceuticals. **05**
- (c) Enumerate various methods of size separation. Explain construction and working of cyclone separator. **05**
- Q.2**
- (a) Classify different dosage forms. Write in detail about solid dosage forms with its advantages and disadvantages. **06**
- (b) What is metrology? Discuss various systems of weights and measures. **05**
- (c) What are Isotonic solutions? How to adjust isotonicity? **05**
- Q.3**
- (a) Define mixing. Give the classification of mixer. Explain Triple roller mill **06**
- (b) Define Immunity. Give the classification of Immunological products with their suitable examples. **05**
- (c) Give the methods of preparation of BCG vaccine in brief. **05**
- Q.4**
- (a) Define tablet. Give the classification of tablet. Write various advantages and disadvantages of tablet as dosage form. **06**
- (b) Describe the compression cycle of single punch tablet machine. **05**
- (c) Write principle and working of fractional distillation. **05**
- Q.5**
- (a) Discuss the various factors affecting the rate of evaporation. Write a note on evaporating stills. **06**
- (b) Discuss principle, working, applications, advantages and disadvantages of Fluidized bed dryer. **05**
- (c) Describe in detail percolation method with their advantages and disadvantages. Write in brief about continuous hot percolation process. **05**
- Q. 6**
- (a) Define capsule. Give the classification of capsule. Write a note on soft gelatin capsule. **06**
- (b) Write in detail about the evaluation test for tablet.(any three) **05**
- (c) Discuss various granulation technique used in manufacturing of tablet. **05**
- Q.7**
- (a) Define Filtration. Discuss various factors affecting the rate of filtration. Write a note on Plate and frame filter press. **06**
- (b) Discuss in detail about sterilization by moist heat. **05**
- (c) Write a note on Indian Pharmacopoeia. **05**
