

GUJARAT TECHNOLOGICAL UNIVERSITY
Diploma Pharmacy First Year Examination June 2009

Subject code: 410001**Subject Name: Pharmaceutics-I****Date: 22/06/2009****Time: 11:30am-2:30pm****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) Discuss factors affecting evaporation rate. write note on "Evaporating pan" **08**
 (b) Write classification of dosage form with examples. Write advantage and disadvantage of oral route and parental route. **04**
 (c) How much amount of 90%, 60%, 30%v/v and water be required to prepare 480 liters of 40% v/v alcohol. **04**
- Q.2** (a) Define Size reduction. Describe with neat labeled diagrams "Cyclone separator" OR "Colloidal mill" **08**
 (b) Discuss various mechanisms of size reduction. **04**
 (c) How much tablets each containing 8.75 grains of mercuric chloride will be required to make 1 gallon of 1 in 1000 solution? **04**
- Q.3** Write the difference between **(Any Four)** **16**
 (a) Dry granulation process and Wet granulation process
 (b) Hard gelatin capsule and Soft gelatin capsule
 (c) Organized drug and Unorganized drug
 (d) Evaporation and Distillation
 (e) Active immunity and Passive immunity
- Q.4** (a) Explain mixing. Describe different type of mixtures with example. Write note on "propeler mixer". **08**
 (b) Write advantage and disadvantage of capsule. **04**
 (c) Write different additives used in tablets formulation. **04**
- Q.5** Write note on **(Any four)** **16**
 (a) B. C. G. vaccine
 (b) Water for Injection
 (c) Freeze drying
 (d) Gaseous Sterilization
 (e) Filter aids and filter media
 (f) Percolation process
- Q. 6** (a) Define Sterilization and classify it. write note on "autoclave" **08**
 (b) Define tablet. Write different type of classification of tablets. **04**
 (c) Disintegration and dissolution test for tablet. **04**
- Q.7** (a) Define capsule. Write classification of it. Write note on "soft gelatin capsule". **08**
 (b) Write principal of dry heat and moist heat sterilization. **04**
 (c) Write the equivalent of household measures in different system. **04**
