

GUJARAT TECHNOLOGICAL UNIVERSITY**B. PHARM SEM – III EXAMINATION - MAY-2011****Subject code: 230002****Subject Name: Pharmaceutical Engineering-II****Date: 20/05/2011****Time: 10.30 am – 01.30 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) How do you achieve content uniformity in pharmaceuticals? **06**
 (b) Explain the regulatory requirements of content uniformity as per USP. **05**
 (c) Discuss the purpose of sampling & its techniques. **05**
- Q.2** (a) Discuss the factors influencing the flow of granules. **06**
 (b) Define Carr's Index. Give its importance. **05**
 (c) What is flow property? Give its importance in pharmacy. **05**
- Q.3** (a) Define Control Chart. List types of control charts & discuss any one. **06**
 (b) Explain the elements of control charts. **05**
 (c) Discuss the importance of control chart in pharmaceutical processing. **05**
- Q.4** (a) Enumerate factors affecting pellet properties. Discuss any two in details. **06**
 (b) Give the applications of extrusion in pharmacy. **05**
 (c) List the equipments used for pelletization. Discuss any one in details. **05**
- Q.5** (a) Define supercritical fluids. Discuss supercritical antisolvent technology. **06**
 (b) Describe the inclusion complexes. **05**
 (c) How do you prepare solid dispersion? **05**
- Q.6** (a) Write a note on hot melt extrusion. **06**
 (b) Name the dosage forms require content uniformity. Give the applications of content uniformity in solids in single unit containers. **05**
 (c) Write a note on angle of repose. **05**
- Q.7** Write a note on followings.
 (a) Super critical fluid in extraction. **06**
 (b) Spheronization. **05**
 (c) Cold extraction. **05**
