Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY B. PHARM. - SEMESTER - III • EXAMINATION - WINTER 2012

Subject code: 230002 Date: 28/12/2 Subject Name: Pharmaceutical Engineering - II		012	
-		0.30 am - 01.30 pm Total Marks: 8	30
Instr	uct	ions:	
	2.	Attempt any five questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a)	Define content uniformity. Give the requirements of content uniformity as per pharmacopoeia.	06
	(b)	uniformity.	05
	(c)	Define Carr's Index and Hausner Ratio. Explain its significance in powder flow and compressibility.	05
Q.2	(a)	Explain the factors affecting powder and granule flow.	06
	(b)	1 1 1	05
	(c)	Write a note on angle of repose.	05
Q.3	(a)	What are control charts? Give the importance of control charts in pharmacy.	06
	(b)	Explain components of control charts.	05
	(c)	Briefly explain types of control charts.	05
Q.4	(a)	Define extrusion and pelletization. Classify various types of machines used for extrusion process technology.	06
	(b)	Write a note on screw extruders.	05
	(c)	Give the applications of extrusion in pharmacy.	05
Q.5	(a)	Define supercritical fluids. Describe the application of supercritical fluids in size reduction.	06
	(b)	Describe the process of preparing solid dispersion using supercritical fluids.	05
	(c)	Enlist supercritical fluids. Enumerate basic techniques in supercritical fluid technology and explain any one in detail.	05
Q.6	(a)	What is Eudragit? Discuss the use of Eudragit in Pelletization.	06
	(b)		05
	(c)	Explain the use of polyethylene oxide in extrusion.	05
Q.7	(a)	Write a note on use of MCC in pelletization.	06
	(b)		05
	(c)	Define and differentiate Lubricants and Glidants giving examples.	05
