Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BPHARM – SEMESTER I • EXAMINATION – SUMMER - 2013

Subject code: 220002 **Date: 29-05-2013**

Subject Name: Pharmaceutics-II

Time: 02:30 pm to 05:30 pm **Total Marks: 70**

Instructions:

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

Q.1	(a)	Describe with diagram, Mechanism and applications of Ball-Mill.	**06**
	(b)	Write a note on types of mixtures.	**05**
	(c)	What are the limitations of miers theory of supersaturation?	**05**
Q.2	(a)	Write a note on mechanisms of size reduction.	**06**
	(b)	Describe soxhlet extractor for continuous hot extraction with labeled diagram.	**05**
	(c)	Write the applications of crystallization in pharmaceutical industry.	**05**
Q.3	(a)	Discuss about cyclone separator with labeled diagram.	**06**
	(b)	Discuss the energy requirement in size reduction.	**05**
	(c)	Write a note on colloidal mill.	**05**
Q.4	(a)	Discuss briefly on effect of compression forces on a bed of granules.	**06**
	(b)	Differentiate: Maceration and Percolation.	**05**
	(c)	Write a note on solvents used for drug extraction.	**05**
Q.5	(a)	What are the methods for waste water treatment in pharmaceutical industries?	**06**
	(b)	Discuss automated process control.	**05**
	(c)	Explain the theory of compaction and compression.	**05**
Q. 6	(a)	What are the reasons for caking during crystallization? Give their remedies.	**06**
	(b)	Enumerate methods used for size separation. Discuss in brief any one of them.	**05**
	(c)	Explain positive mixtures, negative mixtures and neutral mixtures with their suitable examples.	**05**
Q.7	(a)	Give the overview of different industrial hazards.	**06**
	(b)	Write a note on multiple extractions.	**05**
	(c)	Write a brief note on fire extinguisher.	**05**

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