

**GUJARAT TECHNOLOGICAL UNIVERSITY****B.Ph. – SEMESTER II- • EXAMINATION – WINTER • 2015****Subject Code: 220002****Date: 08-12-2015****Subject Name: PHARMACEUTICS II****Time: 2.30 pm – 5.30 pm****Total Marks: 80****Instructions:**

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

<b>Q.1</b>	(a) Write a note on theory of size reduction.	<b>06</b>
	(b) Which are the factors affecting size reduction?	<b>05</b>
	(c) Discuss: Ball mill with labeled diagram.	<b>05</b>
<b>Q.2</b>	(a) Write a note on principles of size separation.	<b>06</b>
	(b) Which are the factors affecting size separation?	<b>05</b>
	(c) Discuss: Elutriation type separators with labeled diagram.	<b>05</b>
<b>Q.3</b>	(a) Which are the different methods of generating nanoparticles?	<b>06</b>
	(b) Write a brief note on fluid energy mill.	<b>05</b>
	(c) What are the pharmaceutical applications of size separation?	<b>05</b>
<b>Q.4</b>	(a) Write a note on theory of mixing.	<b>06</b>
	(b) What is importance content uniformity in solid dosage form?	<b>05</b>
	(c) Classify different mixers and discuss any one.	<b>05</b>
<b>Q.5</b>	(a) Write in brief: factors affecting crystallization process.	<b>06</b>
	(b) Discuss Swenson walker crystallizer.	<b>05</b>
	(c) Discuss about polymorphism and amorphous forms of drugs.	<b>05</b>
<b>Q. 6</b>	(a) Write a note on soxhlet extraction apparatus.	<b>06</b>
	(b) Discuss: solvents used in extraction.	<b>05</b>
	(c) Give application of compaction and compression in tablet dosage form.	<b>05</b>
<b>Q.7</b>	(a) Discuss: chemical hazards in pharmaceutical industry.	<b>06</b>
	(b) How waste water treatment is done in pharmaceutical industry?	<b>05</b>
	(c) Write in brief on automated process control system.	<b>05</b>

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