

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM SEMESTER- II- EXAMINATION – SUMMER- 2023

Subject code: 220002**Date: 09/08/2023****Subject Name: Pharmaceutics-II****Time: 02:30PM TO 05:30PM****Total Marks: 80****Instructions:**

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

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| Q.1 | (a) Discuss Ball mill with clean and neat diagram. | 06 |
| | (b) Describe mechanism of size reduction. | 05 |
| | (c) Explain factors influencing size reduction. | 05 |
| Q.2 | (a) Describe mechanism of solid-solid mixing and liquid-liquid mixing. | 06 |
| | (b) Discuss cyclone separator with diagram. | 05 |
| | (c) Describe the specifications of standard sieves as per IP. | 05 |
| Q.3 | (a) Classify the semisolid mixer and explain principle and working process of triple roller mill with clean and neat diagram. | 06 |
| | (b) Write a short note on planetary mixer. | 05 |
| | (c) Explain vortex formation and its prevention. | 05 |
| Q.4 | (a) Explain Mier's curve with its limitations. | 06 |
| | (b) Describe mechanism of crystallization. | 05 |
| | (c) Define: crystal lattice, crystal habit, polymorphism, crystal hydrates and crystal solvates. | 05 |
| Q.5 | (a) Write a short note on swenson walker crystallizer. | 06 |
| | (b) Give application of crystallization in pharmacy | 05 |
| | (c) What is importance content uniformity in solid dosage form? | 05 |
| Q. 6 | (a) Define: Extraction, Menstruum, Marc, Infusion, Decoction and Maceration. | 06 |
| | (b) Explain soxhlet extraction. | 05 |
| | (c) Give application of compaction and compression in tablet dosage form. | 05 |
| Q. 7 | (a) Name various temperatures measuring devices. Discuss briefly any two in details. | 06 |
| | (b) Write a note on fire extinguishers. | 05 |
| | (c) How waste water treatment is done in pharmaceutical industry? | 05 |
