

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Ph.-SEMESTER-II • EXAMINATION – SUMMER-2018

Subject Code: 220002

Date: 19/05/2018

Subject Name: Pharmaceutics-II

Time: 10:30 AM TO 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.

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| Q.1 | (a) | Explain principle, working, merits and demerits of Ball Mill with label diagram. | 06 |
| | (b) | Write note on factor influencing size reduction. | 05 |
| | (c) | Write a detail note on fluid energy mill. | 05 |
| Q.2 | (a) | Differentiate between Elutriation and Sedimentation. Describe principle, construction and working of Elutriation tank. | 06 |
| | (b) | Describe various mechanisms for Size-Separation. | 05 |
| | (c) | Write the application of size separation in pharmacy | 05 |
| Q.3 | (a) | Define mixing. Discuss about different types of mixtures with suitable examples. | 06 |
| | (b) | With a neat and labelled diagram explain the principle and working of Planatory Mixer. | 05 |
| | (c) | Describe in detail factors affecting mixing process. | 05 |
| Q.4 | (a) | Discuss the Mier's supersaturation theory of crystallization. What are its limitations? | 06 |
| | (b) | Explain the construction and working of Swenson Walker crystallizer with diagram. | 05 |
| | (c) | Explain Caking and prevention of caking. | 05 |
| Q.5 | (a) | With a neat and labeled diagram describe the Soxhlet extractor for continuous hot extraction. | 06 |
| | (b) | Discuss difference between Maceration & Percolation. | 05 |
| | (c) | Write a short note on Solvents of extraction process. | 05 |
| Q.6 | (a) | Describe Hecker and Kawakita equations | 06 |
| | (b) | Write the objective and basic element of Process control system. | 05 |
| | (c) | Give advantages of automated process control system. | 05 |
| Q.7 | (a) | Describe methods for waste water treatment in pharmaceutical industry. | 06 |
| | (b) | Discuss about chemical hazards and its prevention. | 05 |
| | (c) | Write short notes on mechanical hazards. | 05 |
