

GUJARAT TECHNOLOGICAL UNIVERSITY

BPHARM – SEMESTER II (OLD Syllabus) • EXAMINATION – SUMMER • 2015

Subject code: 220002

Date: 30-05-2015

Subject Name: Pharmaceutics-II

Time: 10:30 am - 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 the theories related to size reduction of a powder. | 06 |
| | (b) | Explain about cyclone separator and its usefulness. | 05 |
| | (c) | Explain turbine and propeller type mixer with flow pattern. | 05 |
| Q.2 | (a) | (i) Explain various grades of powder. (3)
(ii) Describe modes of motion in size separation. (3) | 06 |
| | (b) | Describe Swenson-Walker crystallizer with suitable diagram | 05 |
| | (c) | Describe the factors affecting size reduction | 05 |
| Q.3 | (a) | Explain terms with examples, positive, negative and neutral mixture. | 06 |
| | (b) | Explain the theory of compaction and compression. | 05 |
| | (c) | Discuss theory of Extraction of drugs | 05 |
| Q.4 | (a) | Describe Mier's supersaturation theory. What are its limitations? | 06 |
| | (b) | Write a note on hammer mill with a neat diagram. | 05 |
| | (c) | Discuss in brief various pressure measuring instruments used in industries. | 05 |
| Q.5 | (a) | Describe pharmacopoeial standards of sieve. | 06 |
| | (b) | Describe the factors affecting mixing. | 05 |
| | (c) | Write a note on electrical and fire hazards. | 05 |
| Q. 6 | (a) | Explain the effect of compressional force on powders/granules. Explain Kawakita equation and its use in compression. | 06 |
| | (b) | What are safety precautions to be observed in pharmacy laboratory? | 05 |
| | (c) | Define crystallization. Write a detailed note on crystal habit and polymorphism. | 05 |
| Q.7 | (a) | Elaborate the elements of automatic process control system. | 06 |
| | (b) | Write a detailed note on percolation and maceration method of extraction. | 05 |
| | (c) | Classify the size separation methods. Write a note on any one of them. | 05 |
