

Seat No.:-----

Enrolment No.:-----

UKA TARSADIA UNIVERSITY

Maliba Pharmacy College

B. Pharm 2nd Semester Internal Examination April 2014 (*Mid-Sem*)

030020201 – Unit Operation

Time: 10:30 a.m. To 12:30 p.m.

Max. Marks: **40**

Date: 05/04/2014

Instructions:

- Attempt any **FIVE** questions.
- Each question carries **08** marks.
- Make suitable assumption whenever necessary.
- Figures to the right indicate full marks.

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| Q.1 | A) | Explain the objectives of size reduction process in pharmacy. | 2 |
| | B) | Classify liquids on the basis of their miscibility along with examples. | 2 |
| | C) | Explain coarse powder and microfine powder as per Indian Pharmacopoeia. | 2 |
| | D) | Describe physical properties which influence solid mixing process. | 2 |
| Q.2 | A) | Define Baffle. | 1 |
| | B) | Enlist materials employed in construction of sieves. | 1 |
| | C) | Fluid energy mill works on the principle of _____ and _____. | 1 |
| | D) | Write a note on ball mill. | 5 |
| Q.3 | A) | Enlist mixers employed for preparing emulsions. | 1 |
| | B) | Differentiate mass flow and funnel flow patterns of powder flow | 2 |
| | C) | Discuss factors affecting powder flow. | 5 |
| Q.4 | A) | Write principle, construction, working, uses, advantages and disadvantages of Silverson mixer. | 5 |
| | B) | Explain briefly Kick's Theory And Rittinger's Theory For Size Reduction | 3 |
| Q.5 | A) | Discuss instruments employed for wet sieving. | 5 |
| | B) | Explain briefly powder flow problems. | 3 |
| Q.6 | A) | Define Humidification. Show diagrammatically different physical characteristics of air by making a psychrometric chart. | 4 |
| | B) | Enlist different methods for improvement of powder flow. Explain any two methods to improve powder flow. | 4 |
| Q.7 | A) | Describe characterization of powder flow. | 5 |
| | B) | Define: Dew point temperature, Humid heat, Specific volume of air | 3 |