

Seat No.:-----

Enrolment No.:-----

UKA TARSADIA UNIVERSITY
Maliba Pharmacy College
B. Pharm. 3rd Semester Internal Examination 2013 (*Mid-Sem 1*)
030020301- Physical Pharmacy - I

Time: 1:30 p.m. To 3:30 p.m.

Max. Marks: **40**

Date: 30/08/2013

Instructions:

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

- Q.1 A) Enlist the methods for determining particle size of powder? Describe Any Two of them. 04
- B) Define: Specific surface and Bulkiness. Write a note on particle shape and surface area. 04
- Q.2 A) Explain the volume measurement method with the help of a labeled diagram. 04
- B) Enumerate the derived properties of powder & explain any two in detail. 04
- Q.3 A) Define: Rheology, Kinematic viscosity, Bulges, Rheopexy. 04
- B) Give the difference between Shear thinning and Shear thickening system. 04
- Q.4 A) Write a note on Thixotropy. 04
- B) Classify various instruments for measurement of viscosity. Give principle, diagram and procedure of cup and bob viscometer. 04
- Q.5 A) Define: Liquid complex, Latent heat, Super Critical Fluid, Tie line. 04
- B) Explain phase diagram for one component system. 04
- Q.6 A) Explain two component systems containing solid - liquid phase. 04
- B) Discuss structure, properties & significance of liquid crystal. 04
- Q.7 A) Enlist methods for the measurement of true volume and explain any one in detail. 04
- B) Write a note on polymorphism. 04