B. Pharm.
(SEM. IV) EXAMINATION, 2006-07
PHARMACEUTICS - V
(PHYSICAL PHARMACY)

Time : 3 Hours] [Total Marks : 80

Note:  (1) Attempt all questions.
(2) All questions carry equal marks.

1. Attempt any four of the following (short notes) : 4x4
   (a) Eutectic mixtures
   (b) Glassy state
   (c) Half life of a drug
   (d) Accelerated stability testing
   (e) Buffer capacity.

2. What is the importance of (any four) 4x4
   (a) True Density
   (b) Bulk Density
   (c) Flow behaviour of powders
   (d) Optical microscopy
   (e) Number and weight distribution.

V-5055] 1 [Contd...
3 Explain the importance of any four of the following in pharmaceutical practice:
   (a) Surface tension
   (b) Wetting and spreading
   (c) HLB scale
   (d) Solid-liquid interfaces
   (e) Electrical properties at the interface.

4 Attempt any four of the following:
   (a) Distinguish between viscosity and rheology
   (b) Explain dilatant flow with examples.
   (c) Classify complexes and give their brief description
   (d) Describe the working of rotational viscometer
   (e) What is kinematic viscosity?

5 Answer any four of the following:
   (a) How do colloids differ from crystalloids.
   (b) Explain the mechanism of functioning of protective colloids.
   (c) What are the applications of interfacial properties of colloids
   (d) Define controlled flocculation
   (e) How do emulsions differ from suspensions?