B. PHARM.

(SEM. VIII) EXAMINATION, 2006-07

PHARMACEUTICS X (DOSEAGE FORM DESIGN)

Time : 3 Hours] [Total Marks : 80

Note : Attempt all the questions. All are of equal value.

1 Discuss the importance of any four of the following : 4x4
   (a) Particle sizes
   (b) Wetting properties
   (c) Solubility
   (d) Organoleptic properties
   (e) Stability of dosage forms.

2 How do the following affect the formulation design? Give examples (attempt any four) 4x4
   (a) Oxidation
   (b) Hydrolysis
   (c) Polymerization
   (d) Pro-drug approach for elegant products
   (e) Pro-drug for improved bio-availability.

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3 Write detailed account of any **two** of the following:
   (a) Importance of pre-formulation
   (b) Bioavailability testing protocol
   (c) Necessity of *in vitro* dissolution studies.

4 Write notes on any **four** of the following:
   (a) In vitro-In vivo correlation
   (b) Principles of sustained release of drugs
   (c) Delayed release dosage forms
   (d) Methods employed for designing prolonged release dosage forms.
   (e) Sustaining drug action on the basis of solubility.

5 Attempt any **four**:
   (a) Define quality with reference to medicines.
   (b) What are the requirements of equipment for STERILE products under schedule M?
   (c) State the requirements of quality audit.
   (d) How does the packaging affect quality of the product?
   (e) What is the relationship between quality and GMP requirements in general?