

B.Pharm III Year I Semester (R13) Regular & Supplementary Examinations November/December 2016

PHARMACEUTICAL TECHNOLOGY – I

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 x 02 = 20 Marks)
- What is the significance of density of a drug in solid dosage forms?
 - Chelating agents control the oxidation of drugs in dosage forms. How?
 - Antimicrobial preservatives used in emulsion dosage forms should have low partition coefficient. Explain why?
 - Define sedimentation volume and degree of flocculation.
 - What is the significance of partition coefficient in penetration of drugs through skin?
 - What is the significance of Solid-Fat Index of suppository base?
 - Write the nomenclature of chlorofluorocarbon (fluorinated hydrocarbon) type propellants.
 - State Dalton's law and Raoult's law.
 - What are the ideal properties of solvent system that it is used in nail polish preparation?
 - Cationic surfactants should not be used as cleansing agents in shampoos. Why?

PART – B
(Answer all five units, 5 x 10 = 50 Marks)**UNIT – I**

- 2 Explain effect of various physicochemical properties of drug on formulation, stability and bioavailability of tablet dosage forms.

OR

- 3 Write any four drug excipients incompatibility problems. Explain how the drug excipients incompatibility studies are performed?

UNIT – II

- 4 Give a detailed account on preservatives, solubilizers and emulsifiers used in liquid dosage forms.

OR

- 5 Write about methods of preparation and evaluation of ophthalmic ointments. Add a note on containers used.

UNIT – III

- 6 Explain mechanisms of drug penetration through skin. Add a note on factors influencing penetration.

OR

- 7 Write about different specifications of suppository bases? Classify suppository bases. Explain about cocoa butter (theobroma oil).

UNIT – IV

- 8 Write about formulation of different types of foam systems to be packed as aerosols.

OR

- 9 Give a detailed account on quality control of pharmaceutical aerosols.

UNIT – V

- 10 Write in detail about formulation and preparation of lipsticks.

OR

- 11 Write a note on formulation, preparation and packaging of Toothpaste.