

SEMESTER - VIII

PHARMACEUTICS-VII (Pharmaceutical Technology III)

PH. 8.1 THEORY

3 hours / week

UNIT -I

1. Preformulation studies: Principal areas like

- a. Bulk Characterization: Crystallinity and Polymorphism, hygroscopicity, bulk density, powder flow properties.
- b. Solubility analysis: pKa, pH solubility profile, Common ionic effect , thermal effects, solubilization ,partition coefficient and dissolution.

UNIT -II

- 2. Sustained release formulations:** Concept, Rationale for Extended – Release Pharmaceuticals, Terminology, Techniques of Extended – Release oral dosage forms, Delayed - Release oral dosage forms, Evaluation of sustained release formulations.

UNIT -III

- 3. Brief introduction to controlled release dosage forms.
Design and evaluation of transdermal drug delivery systems.
Basic concepts of liposomes, nanoparticles, resealed erythrocytes, osmotic pump, implants, IUDs and ocuserts,**

UNIT -IV

- 4. Cosmetics:** Fundamentals of cosmetic science, Formulation, preparation and packaging of cosmetics like anti-perspirants & deodorants, creams, lotions, shampoos, hair conditioners & dyes, nail polish and lipsticks. Special formulation considerations for baby care products.