FOURTH YEAR B.PHARM. EXAMINATION PAPER I – FORMULATIVE PHARMACY AND BIOPHARMACEUTICS

O.P. Code: 564267

Time: Three hours Maximum: 100 Marks

I. Essay: $(2 \times 20 = 40)$

1. Give an account of stability testing protocol for various pharmaceutical products. How drug products can be stabilized from the influence of oxidation?

2. Explain about Bio-availability testing.

II. Short notes: $(8 \times 5 = 40)$

- 1. Study of particle size and density of drugs in preformulation studies.
- 2. Soft gelatin capsule shell and content.
- 3. Coacervation phase separation.
- 4. Tablet excipients.
- 5. Formulation of film coating solutions.
- 6. Benefits and limitations of prolonged action Pharmaceuticals.
- 7. Osmotic drug delivery systems.
- 8. Biological factors influencing gastrointestinal absorption of drugs.

III. Short answers: $(10 \times 2 = 20)$

- 1. Significance of drug solubility.
- 2. Quality control tests on capsules.
- 3. Methods of microencapsulate liquids.
- 4. Sticking and picking in film coated tablets.
- 5. Difference between prolonged (sustained) release and controlled release drug delivery systems.
- 6. Properties of drugs suitable for transdermal drug delivery systems.
- 7. Raw materials required for liposomes.
- 8. Apparent volume of distribution.
- 9. Parameters affecting drug dissolution.
- 10. Dissolution testing apparatuses.
