(LK 4267) FEBRUARY 2017 Sub. Code: 4267

B.PHARM. EXAMINATION FOURTH YEAR

PAPER I – FORMULATIVE PHARMACY AND BIOPHARMACEUTICS

O.P. Code: 564267

Time: Three hours Maximum: 100 Marks

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

1. Describe the study of physical properties and solubility analysis of drugs in preformulation studies.

2. Explain the types and construction of oral prolonged action pharmaceuticals.

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

1. Degradation of drugs in pharmaceutical dosage forms with examples.

- 2. Evaluation of capsules.
- 3. Multiorifice centrifugation.
- 4. Tablet compression machine.
- 5. Types of tablet coating.
- 6. Transdermal drug delivery systems.
- 7. Physicochemical factors affecting oral absorption of drugs.
- 8. Disintegration test on tablets.

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

- 1. Significance of crystallinity and polymorphism of drugs.
- 2. Buccal and sublingual tablets.
- 3. Applications of nanoparticles.
- 4. Superdisintegrants.
- 5. Dry granulation in tablet production.
- 6. Reasons for weight variation of tablets.
- 7. Hepatic first pass and bioavailability.
- 8. Characteristics of gelatin for capsule shell production.
- 9. Renal clearance.
- 10. Plasticizers.
