

(LR 4267)

DECEMBER 2020

Sub. Code: 4267

(AUGUST 2020 SESSION)

B.PHARM. DEGREE EXAMINATION FOURTH YEAR

PAPER I – FORMULATIVE PHARMACY AND BIO-PHARMACEUTICS

O.P. Code: 564267

Time: Three hours Maximum: 100 Marks

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

- 1. Write the benefits and limitations of prolonged action pharmaceuticals. Discuss the different types, construction and evaluation of prolonged action pharmaceuticals.
- 2. Define Pharmacokinetics and discuss the compartment models. Write a note on the following.
 - (a) Biological half life. (b) Apparent Volume of Distribution
 - (c) Elimination rate constant (d) Renal clearance.

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

- 1. Mechanism of drug absorption.
- 2. Physicochemical properties of drug molecule.
- 3. Process of sugar coating.
- 4. Accelerated stability studies.
- 5. Evaluation of Transdermal delivery systems.
- 6. Procedure for bio-equivalency studies.
- 7. Film defects and rectification.
- 8. Evaluation of hard gelatin capsules.

III. Short answers on:

 $(10 \times 2 = 20)$

- 1. Lubricant and glidant.
- 2. Base absorption.
- 3. Hazing/dull film.
- 4. Double impression.
- 5. Bio-pharmaceutics.
- 6. Noyes Whitney equation.
- 7. Dielectric constant.
- 8. Slugging.
- 9. Different type of tablets.
- 10. Film tensile strength.
