

M.PHARM
(SEM II) THEORY EXAMINATION 2018-19
ADVANCED BIOPHARMACEUTICS AND PHARMACOKINETICS

Time: 3 Hours

Total Marks: 75

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

- 1. Attempt all questions in brief. 10 x 2 = 20**
- a. What are rate limiting steps in absorption of drug?
 - b. What is the importance of gastric emptying in absorption?
 - c. What are water pore in biological membrane and their significance in drug absorption?
 - d. Name three alternate methods for drug dissolution testing for sustained release dosage form?
 - e. What is packet renewable theory?
 - f. What are binding interactions?
 - g. Name various non compendia methods for dissolution.
 - h. What is cytochrome-p450 giving one interaction associated with it?
 - i. Explain carrier mediated transport of drug.
 - j. What are the effects of GI disease on absorption?

SECTION B

- 2. Attempt any two parts of the following: 2 x 10 = 20**
- a. Explain pH partition theory and its limitations.
 - b. How you will explain pharmacokinetic parameters of IV diffusion?
 - c. What are various study designs for bio-equivalence studies?

SECTION C

- 3. Attempt any five parts of the following: 7 x 5 = 35**
- a. What is IVIVC, explain its significance?
 - b. Write short note on gene therapy.
 - c. What are monoclonal antibodies, how they are advantageous?
 - d. Write a detailed note on drug interactions.
 - e. Explain the terms- In Vitro, In Vivo, In situ and In silico.
 - f. What are various bio-availability determination methods?
 - g. How you will determine the performance of a dosage form, write a note?