

AV – 2486

Fourth Year Pharm. D. Examination

BIOPHARMACEUTICS AND PHARMACOKINETICS

Paper - 4.5

(USC – 35131)

P. Pages : 2

Time : Three Hours]

[Max. Marks : 70

- Note :** (1) Answer any **Five** questions from **Two** to **Nine** questions.
(2) Question No. **One** is compulsory.
(3) Assume suitable data wherever necessary.
(4) Illustrate your answer wherever necessary with the help of neat sketches.
(5) Use pen of Blue/Black ink/refill only for writing the answer book.

1. Define bioavailability. Explain various methods used for determination of bioavailability. 15
2. Explain the various models of pharmacokinetic analysis. 11
3. Define drug absorption. Discuss the various factors influencing GI absorption of a drug. 11
4. Discuss process of glomerular filtration, active secretion and passive reabsorption. 11
5. Discuss the two compartment open model after intra - venous administration. 11
6. (a) Write a note on plasma protein bindings. 5
(b) Explain PH partition theory and its modifications. 6

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7. (a) Explain in brief about Michaelis Menton equation. 5
(b) Explain physiological barrier to drug distribution. 6
8. Write a note on :—
(a) Wagner - Nelson method.
(b) Factors affecting renal excretion. 11
9. What are the major parameters studied in the urinary excretion data ? Add a note on apparent volume of distribution. 11

