

Code: 9R01702

B.Pharm IV Year I Semester (R09) Supplementary Examinations November 2017

BIOPHARMACEUTICS & PHARMACOKINETICS

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 Give a detailed account on the influence of biopharmaceutical properties of drugs on the development of dosage forms.
- 2 (a) Describe various passive mechanisms of drug absorption.
(b) Explain the effect of pharmaceutical factors on drug absorption.
- 3 What is drug distribution? Give a detailed account on factors affecting drug distribution.
- 4 (a) What is protein binding? Differentiate plasma, protein binding and tissue protein binding.
(b) Write a detailed note on various plasma proteins responsible for drug binding.
- 5 (a) What is clearance? Give an account on renal clearance.
(b) Explain how Michaelis – Menten equation describes nonlinear pharmacokinetics.
(c) Derive the equation to calculate excretion rate constant of a drug from urinary excretion data.
- 6 (a) Write about dose adjustment in case of renal failure.
(b) Write about drug interactions during absorption and distribution with examples.
- 7 (a) Explain the significance of conducting bio-availability and bio equivalent studies.
(b) Discuss in detail about various study designs used in bio equivalent studies.
- 8 (a) Describe various dissolution apparatus according to I.P for in-vitro dissolution test.
(b) What is IVIVC? Write a brief note on levels of IVIVC.
(c) Write a note on ANOVA.
