M.PHARM. DEGREE EXAMINATION FIRST YEAR BRANCH I – PHARMACEUTICS PAPER III – BIOPHARMACEUTICS AND PHARMACOKINETICS

Q.P. Code: 262903

Time: Three hours Maximum: 100 marks

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

1. a) Write about the biological factors affecting drug absorption.

- b) Mention an *In vitro* and *In vivo* method for determining drug absorption.
- 2. a) Derive Michaelis Menten equation.
 - b) Describe about *In Vitro* and *In vivo* correlation method.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Differentiate Active and Passive transport.
- 2. Write about placental drug distribution.
- 3. Explain any two phase II reaction with example.
- 4. Describe Non renal excretion.
- 5. Explain first order kinetics.
- 6. Explain Area under first moment curve and mean residence time.
- 7. Specify the CDSCO protocol for bioequivalence study.
- 8. Write the concept involved in pharmacokinetic modeling.
- 9. Mention the concept behind multiple dosing in oral administration.
- 10. Describe the dosage adjustment procedure during cardiovascular and liver disorders.
