

School of Pharmaceutical Sciences

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Time : 1.30 hrs

Total Marks : 25

April 2007 – I Sessional Examination

M. Pharm (Pharmaceutics) II Semester

Biopharmaceutics MPY-201

Question 1 is compulsory

Q.1 The Cumulative amount excreted unchanged after intravenous administration of 100mg of a drug results are given in table –

Time t hr	Cumulative amount Au (mg)
0.0	0.0
0.5	8.45
1.0	14.83
1.5	18.65
2.0	21.64
2.51	23.76
3.0	25.25
3.5	26.31
4.0	27.06
5.0	27.96
6.0	28.41
7.0	28.63
8.0	28.75
∞	28.85
Estimate	

- 1) The half life of the drug.
 - 2) The overall elimination-rate constant K
 - 3) The rate constant for elimination of unchanged drug. And
 - 4) The cumulative amount of drug excreted unchanged at 3.5 hr 12.5
- Q.2**
- a) Give application and limitation of physiologic pharmacokinetic models. 12.5
 - b) What do you understand by mean absorption time and mean dissolution time.

OR

- Q.3**
- a) Compare and contrast excretion rate method and sigma - minus method. 12.5
 - b) Factors influencing drug absorption and bioavailability.