

C.U.SHAH UNIVERSITY

Summer Examination-2017

Subject Name: Pharmaceutical Dosage Form Design II

Subject Code: 4PS08DFD1

Branch: B.Pharm

Semester: 8

Date: 15/04/2017

Time: 02:30 To 05:30

Marks: 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

Q-1 Define the following terms (14)

- a) Lag time
- b) Non-renal clearance
- c) Burst effect
- d) Niosomes
- e) Maintenance dose
- f) Loading dose
- g) Volume of distribution
- h) Biological half life
- i) Bio pharmaceuticals
- j) Pharmacokinetics
- k) Biowaiver
- l) Total body clearance
- m) Hepatic failure
- n) Michaelis Menten Equation

Attempt any four questions from Q-2 to Q-8

Q-2 Attempt all questions (14)

- a. Differentiate Novel Drug Delivery System from Conventional Dosage Form. (7)
How is it beneficially to patient?
- b. Describe the ideal requirements for sustained release formulation. (7)

Q-3 Attempt all questions (14)

- a. What properties are required for the drug to be a candidate for transdermal drug delivery system? Write evaluation method for of TDDS. (7)
- b. Which are rationales for gastro-retentive drug delivery? Explain expandable approach. (7)

Q-4 Attempt all questions (14)

- a. Write a note on ocular inserts. (7)
- b. Mention the advantages and limitations of colon targeted drug delivery system. (7)



- | | | |
|------------|---|-------------|
| Q-5 | Attempt all questions | (14) |
| a. | What is the composition of liposome? Mention the therapeutic applications of liposome. | (7) |
| b. | Short note on Urine data analysis | (7) |
| Q-6 | Attempt all questions | (14) |
| a. | Short note on Wagner-Nelson method | (7) |
| b. | What do you mean by absorption window? How does it affect formulation and drug delivery? | (7) |
| Q-7 | Attempt all questions | (14) |
| a. | Classify compartmental model & compare them with non compartmental model & physiological model. | (7) |
| b. | Short note on two compartment models. | (7) |
| Q-8 | Attempt all questions | (14) |
| a. | Explain term: Drug interaction. Discuss ADME drug interactions with suitable examples. | (7) |
| b. | Short note on non linear pharmacokinetics. | (7) |

