Printed Pages:01 **Sub Code: MPH 203T**

Paper Id: | 2 | 5 | 6 | 2 | 0 | 9 | **Roll No.** | | | | | | | | | | |

M. PHARM.
(SEM II) THEORY EXAMINATION 2017-18
COMPUTER AIDED DRUG DELIVERY SYSTEM

Time: 3 Hours *Total Marks: 75*

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. **Attempt *all* questions in brief.** **10 x 2 = 20**

a. What are the different levels of variables?

b. Define discrete and continuous data?

c. How Cadila System is used for simulation?

d. Define Quality by Design.

e. What do you understand by confidence regions?

f. What do you understand by sensitivity analysis?

g. Give the various points considered in computer ethics?

h. What is Monte Carlo simulation?

i. Write the advantages of artificial intelligence.

j. What do you understand by BCRB?

SECTION B

2. **Attempt any *two* parts of the following:** **2 x 10 = 20**

a. Write a detailed role of computers in pharmaceutical formulations.

b. How computers are helpful for clinical data collection and management?

c. What do you understand by emulsions? How computers are useful for development of emulsions by using simulation.

SECTION C

3. **Attempt any *five* parts of the following:** **5 x 7 = 35**

a. Write a note on population modeling in pharmaceutical research and development.

b. Write a detailed note on In-vitro dissolution and in-vitro-in vivo correlation.

c. Give the details about ethics in computing with respect to pharmaceutical research.

d. What is mechanistic modeling? What are the advantages of mechanistic modeling?

e. Discuss the mechanism of drug absorption. How computer simulation is useful in drug absorption?

f. Write a detailed note on artificial intelligence.

g. Write a detailed note on biowaiver considerations.