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P-MPH203-T

Seat No. _____

M. Pharm. (Sem. II) (CBCS) Examination

July/August – 2018

MPH-203T : Computer Aided Drug Development

Time : **3** Hours] [Total Marks : **75**

Instructions :

(1) Figure to the right indicates marks.

(2) Draw neat and clean diagrams as and when required.

1 Answer all the questions, each carry 2 marks : **10×2=20**

(1) What is the role of P-gp ?

(2) What do you mean by population modelling ?

(3) What are statistical parameters ?

(4) Define drug absorption and active transport.

(5) How parameter sensitivity analysis performed ?

(6) What do you mean by simulation ?

(7) Describe innovative uses of computers in R & D.

(8) How simulation of protein and genes help in drug development ?

(9) Differentiate descriptive versus mechanistic modelling.

(10) How drug permeate through intestine ?

2 Answer any 2 out of 3, each carry 10 marks : **2×10=20**

(1) Describe the ICH Q8 guideline in detail.

(2) Write a note on computer simulation of whole animal and organs.

(3) Describe in detail clinical data collection and management.

3 Answer any 7 out of 9, each carry 5 marks : **7×5=35**

(1) Describe the computer involvement in pharmaceutical drug development.

(2) Write a detailed note on optimization parameters.

(3) Describe in detail artificial intelligence. ,

(4) Write a note on IVIVC.

(5) Describe advantages and disadvantages of automation in pharmaceuticals.

(6) What do you mean by ethics of computing in pharmaceutical research ?

(7) Write a detailed note on biowaiver.

(8) Describe in detail ASBT.

(9) Write a note on BBB-choline transporter models.
