

DC-BP704T

Seat No.

M. P. M. (Sem. VII) (W.E.F. 2017) Examination March – 2022

BP-704-T: Novel Drug Delivery System - Theory

Time: 3 Hours [Total Marks: 75]

Instructions: (1) Answer the following questions.

- (2) Figure to the right indicate marks.
- (3) Draw neat & clean diagrams as required.
- 1 Answer the following questions:

 $10 \times 2 = 20$

- (a) Define permeation enhancer and give examples of it.
- (b) What do you mean by drug targetting?
- (c) Comment: Liposomes are considered versatile carriers for parenteral drug delivery.
- (d) What do you mean by Loading dose and Maintenance Dose?
- (e) Differentiate sustained and controlled release dosage forms.
- (f) How GRDDS differ from sustained release dosage form
- (g) Differentiate the Liposomes and Niosomes.
- (h) Give the examples of marketed transdermal formulations.
- (i) Give the rationale for Buccal Drug Delivery System.
- (j) Enlist the applications of Intrauterine Drug Delivery Systems.
- 2 Answer any two out of the following:

 $2 \times 10 = 20$

- (a) Give an account of Floating approaches for designing of Gastro retentive dosage form.
- (b) What properties are required for the drug to be a candidate for transdermal drug delivery system? Explain formulation of transdermal drug delivery system.
- (c) Describe in detail about the physiochemical and biological factors affecting design of oral sustained release systems.

- 3 Answer any seven out of the following: 7×5=35
 - (a) Describe Microencapsulation technique for particle coating.
 - (b) Discuss method of preparation of Nanoparticles.
 - (c) Discuss the formulation and recent innovations in MDI (Metered dose inhaler) technology.
 - (d) Write a note on mucoadhesive polymers.
 - (e) Explain in detail about methods to overcome the Intra ocular barriers.
 - (f) Write a note on-osmotic pump.
 - (g) Explain the various factors affecting in Nasal drug delivery system.
 - (h) Briefly describe the importance of various properties of polymers in formulation of controlled release drug delivery systems.
 - (i) Discuss in brief about Niosomes with application.

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