Code: 13R00801 **R13**

B.Pharm IV Year II Semester (R13) Advanced Supplementary Examinations July 2018

NOVEL DRUG DELIVERY SYSTEMS

(For 2013, 2014 regular & 2014, 2015 lateral entry admitted batches only)

Time: 3 hours Max. Marks: 70

PART – A

(Compulsory Question)

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1 Answer the following: (10 X 02 = 20 Marks)

(a) Give any two rationale behind drug delivery system.
(b) Differentiate sustained and controlled release action of drug.
(c) Give two examples for Ion exchange resin.
(d) Mention the ingredients required for floating tablets.
(e) Mention any two nanoparticle formulation methods.
(f) Which type of drugs can be loaded in resealed erythrocytes?
(g) State any two physico-chemical requirements for a drug for transdermal drug delivery.
(h) Specify the important barriers involved in transdermal drug delivery.
(i) Write any two examples for mucoadhesive polymer.
(j) Mention the benefits of Buccal drug delivery system.

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

2 Elaborate the concept involved in controlled release and sustained release dosage form.

OR

3 Explain the factors influencing the design of sustained release dosage form.

UNIT – II

4 Explain Noyes whitney equation. Mention the parameters which control dissolution rate.

OR

5 Describe the formulation and mechanism involved in osmotic drug delivery.

UNIT – III

6 Outline the preparation methods for liposomes.

OR

7 Discuss any four evaluation methods for nanoparticles.

UNIT – IV

8 Classify the types of transdermal drug delivery system. Mention any two formulation methods.

OR

9 Mention the factors affecting the permeation of drugs across skin.

UNIT – V

10 Enumerate the formulation parameters to be considered for nasal drug delivery system.

OR

11 Describe the mechanism involved in bio adhesion.

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