MCM-014-003803

Seat No. _____

M. P. M. (Sem. VIII) (CBCS) Examination

May / June - 2018

Dosage Form Design - II

Faculty Code : 014

Subject Code : 003803

Time : **3** Hours] [Total Marks : **80**

Instructions : (1) Answer and tie both the sections separately.
(2) Figure to the right indicates marks.
(3) Answer any three (3) questions from each section.
(4) Que. One (1) & Que. Five (5) are compulsory.
(5) Draw neat and clean diagrams as required.

SECTION – I

1 Answer any **seven** out of given ten questions : **7×2=14**

(a) Differentiate sustained and controlled release dosage forms.

(b) What do you mean by site specific and targeted drug delivery system ?

(c) Give the example of polymer which may be used in floating - non effervescent monolithic gastro retentive tablet.

(d) What are the limitations of Colon targeted and Gastro retentive DDS ?

(e) Enlist the drug selection criteria for Colon targeted DDS.

(f) Define clinical Pharmacokinetics and describe scope of it.

(g) Comment: Niosomes are more stable than liposomes.

(h) Describe the key components of oral osmotic drug delivery system with examples.

(i) Classify the polymers used for preparation of matrix tablets. Give two names class.

(j) What are the important characteristics to be evaluated for design of pan suspensions ?

2 Answer the following :

(a) Explain the various factors affecting the stability of the formulation. **7**

(b) Write a note on Oros osmotic pump. **6**

3 Answer the following :

(a) Justify the rationale for gastro retentive drug delivery systems and explain floating approach. **7**

(b) Write a note on : Hydrogel. **6**

4 Answer the following :

(a) Write in detail formulation design of transdermal drug delivery system. **7**

(b) Explain loading and maintenance dose in control release formulations with their equations. **6**

SECTION – II

5 Answer any **two** out of given three questions : **2×7=14**

(a) Explain the pharmaceutical approaches for colon targeting.

(b) Write a brief account on matrixing and bracketing for stability study.

(c) Explain liposomes and niosomes. Describe any one method for their preparation.

6 Answer the following :

(a) Write in detail about formulation design of transdermal drug delivery system. **7**

(b) Describe in detail about factors affecting design of oral sustained release dosage forms. **6**

7 Answer the following :

(a) Write a detail note on Accelerated stability study. **7**

(b) What do you mean by combination therapy ? What kind of drug interactions are possible, explain giving suitable examples. **6**

8 Answer the following :

(a) Explain in detail about evaluation parameters of Transdermal DDS and Gastro retentive DDS. **7**

(b) Write a note on types of controlled drug delivery systems. **6**