



HX-M2011126

Seat No. _____

Masters of Pharmacy (Sem. II) (CBCS) Examination

June / July – 2017

NDDS : Multifunctional & Regulatory Aspects

(Elective - II)

Time : 3 Hours]

[Total Marks : 80

- Instructions :**
- (1) Answer and tie both the sections separately.
 - (2) Figures to the right indicate marks.
 - (3) Answer any three questions from each section.
 - (4) Question no. 1 and Question no. 5 are compulsory.
 - (5) Draw neat and clean diagrams as required.

SECTION – I

1 Answer any SEVEN question out of TEN : 7×2=14

- (1) What is controlled drug delivery system?
- (2) Enumerate the criteria for selection of drug for colon targeted drug delivery system.
- (3) Write down the advantages of nanosuspension.
- (4) Enumerate the technique of preparation of nanocapsules.
- (5) Write the composition of SEDDS.
- (6) Enlist the application of microspheres.
- (7) Write difference between SEDDS and SMEDDS.
- (8) Enlist the evaluation of TDDS.
- (9) What is in situ gelling system?
- (10) Write difference between emulsion and microemulsion.

2 Answer the following Questions :

- (1) Explain the formulation of liposomes. **6**
- (2) Write a note on microemulsion. **7**

- 3** Answer the following Questions :
- (1) Write a note on formulation and evaluation of in situ gelling system. **6**
- (2) Explain method of preparation of microspheres. **7**
- 4** Answer the following Questions :
- (1) Write the formulation and application of ethosomes. **6**
- (2) Write the rationale behind colon targeted drug delivery system. Discuss in brief various approaches used for colon targeted drug delivery system. **7**

SECTION – II

- 5** Answer any **TWO** out of **THREE** Questions : **2×7=14**
- (1) Write the method of preparation of nanosuspension.
- (2) Write a note on transdermal patch.
- (3) Write the formulation and application of multiple emulsion.
- 6** Answer the following Questions :
- (1) Write a note on GRDDS. **6**
- (2) Write a note on neosomes. **7**
- 7** Answer the following Questions :
- (1) Write a note on ointments and gels. **7**
- (2) Write a note on microcapsules. **6**
- 8** Answer the following Questions :
- (1) Write a note on formulation consideration for herbal medicines. **6**
- (2) Write the formulation approaches for TDDS. **7**