



MA-MPH-102-T

Seat No. _____

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

December – 2017

Drug Delivery Systems : 102

Time : 3 Hours]

[Total Marks : 75

1 Answer the following questions : **10×2=20**

- (a) Write the criteria of selection of delivery technology for Proteins and Peptide drugs.
- (b) Classify polymers with examples.
- (c) Why folding endurance is more important in transdermal drug delivery system?
- (d) Give advantages and disadvantages of Gastro Retentive Drug Delivery Systems.
- (e) What do you mean by PEGylation ?
- (f) Enumerate the system parameters affecting controlled drug delivery.
- (g) Compare the iontophoresis and electroporation.
- (h) Enumerate the factors affecting intraocular bioavailability.
- (i) Write the Need for protein and peptide drug delivery system.
- (j) What do you mean by Hydrodynamic Pressure activated DDS ? Give the example of it.

2 Answer any **two** out of the following : **2×10=20**

- (a) Which drug is ideal candidate for transdermal drug delivery system? .Mention the classification of transdermal patches. Describe the composition of transdermal patch.
- (b) Explain the problems associated with protein/peptide drug delivery.
- (c) Write a note on activation modulated drug delivery system.

3 Answer any **7** out of the following : **7×5=35**

- (a) Discuss design and application of iontophoresis.
- (b) Write a note on Osmotic Pressure regulated DDS.
- (c) Explain different approaches of ocular control release system.
- (d) State various approaches of GRDDS and explain any one in detail.
- (e) Give the Mechanisms of Drug Delivery from S R/CR formulation.
- (f) Define Permeation Enhancer and write a detailed note on it.
- (g) Write in detail the factors affecting gastric retention.
- (h) Write down the approaches to improve oral absorption of Proteins and Peptides.
- (i) Write a note on insulin pump.
