



**DBX-MPH-102-T**

Seat No. \_\_\_\_\_

**Master of Pharmacy (Sem. I) (WEF-2017)  
Examination**

**July - 2022**

**Drug Delivery System (MPH-102T)**

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 : **10×2 = 20**

- (a) Enlist the importance of protein and peptides in Pharmaceuticals.
- (b) Classify the rate controlled drug delivery system.
- (c) What is OROS-CT osmotic system?
- (d) Write about polymers used for controlled and sustained drug delivery system.
- (e) Why folding endurance is more important in transdermal drug delivery system?
- (f) Give the general Pathway for ocular absorption.
- (g) Write the mechanism of vapor pressure activated DDS.
- (h) How GRDDS is different from Sustained Release dosage form?
- (i) Compare the iontophoresis and electroporation.
- (j) Give the limitation of Buccal drug delivery system.

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

- (a) Mention the suitability of drugs for GRDDS. Explain the low density approach.
- (b) Explain the concept and types of Activation Modulated Drug Delivery Systems with examples.
- (c) Explain the merit, demerit, factors influencing for SR/CR formulation. Discuss the dissolution controlled approach in detail.

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

- (a) Which are the potential sites for bio adhesion? Write a note on Methods of formulation and its evaluation of buccal drug delivery system.
  - (b) Write short notes on Single shot vaccines.
  - (c) Briefly explain the concept of PEGylation and its use in delivering peptide.
  - (d) Discuss the formulation and evaluation of transdermal patch.
  - (e) Discuss the approaches to improve oral absorption of Proteins & Peptides
  - (f) Write a note on Personalized Medicine.
  - (g) Define Permeation Enhancer and write a detail note on it.
  - (h) Explain in detail about various Ophthalmic inserts.
  - (i) Discuss osmotic activated drug delivery systems.
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