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J-MPH-102-T

Seat No. _____

M. Pharm. (Sem. I) Examination

January - 2020

Drug Delivery System : MPH 102 T

Time : **3** Hours] [Total Marks : **75**

Instruction : Figure to the right indicates marks

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

(a) Define sustained release and controlled release.

(b) Define permeation enhancer with its examples.

(c) Explain the term Bioelectronic medicines.

(d) Enlist the advantages and disadvantages of GRDDS.

(e) What do you mean by telepharmacy?

(f) Differentiate liposomes and Niososmes.

(g) Enlist the Factors which are responsible for minimum ocular Bioavailability.

(h) Define Biodegradable polymers and give examples of it.

(i) Explain Pharmacogenetics.

(j) Give the application of 3D printing of pharmaceuticals.

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

(a) Explain the advantages, disadvantages, formulation consideration and evaluation of Transdermal Drug Delivery systems.

(b) Explain the various approaches to overcome the barriers for ocular drug delivery system.

(c) Explain mechanical and pH activated Drug delivery system.

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

(a) Explain the principle of mucoadhesion.

(b) Classify the ophthalmic drug delivery system and explain in detail about ophthalmic inserts.

(c) Discuss Enzyme activated DDS.

(d) Explain the various factors affecting on sustained release drug delivery system.

(e) Describe Osmotic activated Drug Delivery Systems.

(f) Explain the mechanism of Drug Delivery from controlled release formulations.

(g) Give a brief note on formulation along with its evaluation for protein and peptide delivery system.

(h) Describe various approaches of GRDDS.

(i) Explain in detail about single shot vaccines.
