PAPER ID-311144

Subject Code: BP704T

Roll No:

BPHARM

(SEM VII) THEORY EXAMINATION 2023-24

NOVEL DRUG DELIVERY SYSTEM (NDDS) – THEOR

TIME: 3 HRS **M.MARKS: 75**

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a.	Name four methods of microencapsulation along with examples.
b.	Mention the applications of monoclonal antibodies on targeted drug delivery.
c.	Define metered dose inhalers.
d.	Mention basic components of Transdermal drug delivery systems.
e.	Mention the advantages and disadvantages of Buccal drug delivery system.
f.	State the functions of the various structural components of liposomes.
g.	Define Niosomes and Nanoparticles.
h.	State the principles of bio-adhesion.
i.	Name the intra-ocular barriers to ophthalmic drug delivery.
j.	Define Hydrodynamic pressure activated DDS.

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a.	Discuss the development and applications of IUDs in pharmaceutical drug delivery.
b.	Discuss implantable drug delivery systems with special emphasis on osmotic pump.
c.	Explain the different formulation approaches of Transdermal drug delivery systems.

SECTION C

3. Attempt any *five* parts of the following: **5 x 7 = 35**

a.	Describe the various approaches for designing controlled release formulations.
b.	Explain in brief the various methods to overcome ocular barriers for effective drug delivery.
c.	Define and classify polymers and explain applications of polymers.
d.	Write a brief note on transmucosal permeability and formulation considerations for buccal drug delivery systems.
e.	Mention the various formulation approaches for gastro-retentive drug delivery systems.
f.	Define targeted drug delivery systems and explain various drug-targeting approaches.
g.	State and explain the significance and limitations of naso-pulmonary drug delivery systems.