PAPER ID-312097

Roll No:

MPHARM
(SEM II) THEORY EXAMINATION 2024-25
MOLECULAR PHARMACEUTICS (NANO TECH & TARGETED DDS)
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.	How is CRISPR used in gene therapy
b.	Write a note on Cellular Uptake and Binding.
c.	How can we plan activation of drug at target site?
d.	Define molecular recognition.
e.	Write the types of liposomes.
f.	Define therapeutic antisense molecules.
g.	Write the future of aptamers.
h.	Write the advantages of phytosomes.
i.	Give principle of electrosomes.
j.	Define microsphere and its pharmaceutical applications.

SECTION B

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

a.	When we select step-up method of nanoparticle synthesis? Give its method.
b.	Compare between active and passive biological process involved in drug targeting.
c.	Define gene therapy;What are the main challenges in delivering genes to target cells?

SECTION C

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

a.	Discuss the role of tumor targeting in drug delivery system.
b.	Write the principle and challenges of liposome drug delivery system.
c.	Write the method for preparation of monoclonal antibodies.
d.	Enlist various propellants used in preparation of aerosols. Write the advantage of aerosols.
e.	Write a note on bio-distribution.
f.	Describe in vivo gene therapy.
g.	How can we prepare brain targeted drug delivery system?