

M PHARM
(SEM-II) THEORY EXAMINATION 2018-19
MOLECULAR PHARMACEUTICS (NANO TECHNOLOGY & TARGETED DDS)

Time: 3 Hours**Total 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. Define targeted drug delivery.
 - b. Define significance of drug targeting.
 - c. Define dual targeting.
 - d. Define ADEPT & GDEPT.
 - e. Define liposome with its significance.
 - f. Define microcapsule and microsphere.
 - g. Define hybridoma technology.
 - h. Define electrosome.
 - i. Define propellant.
 - j. Define Gene expression.

SECTION B

- 2. Attempt any two parts of the following:** **2 x 10 = 20**
- a. Explain the important strategies of drug targeting.
 - b. Define ex-vivo & in-vivo gene therapy.
 - c. Explain introduction preparation and evaluation of Nano-Particles.

SECTION C

- 3. Attempt any five parts of the following:** **7 x 5 = 35**
- a. Explain introduction preparation and evaluation of microsphere & micro capsule.
 - b. Write a short note on-
 - i. Coacervation phase separation technique for microencapsulation.
 - ii. Air suspension method
 - iii. polymerization
 - c. Explain introduction preparation and evaluation of aerosols.
 - d. Write a short note on-
 - i. Noisome,
 - ii. Aquasomes
 - iii. Phytosomes
 - iv. Electrosomes.
 - e. Compare spray drying and spray congealing method of microencapsulation.
 - f. Explain Preparation and application of Monoclonal antibodies.
 - g. Explain in brief with example the role of receptor and ligands in targeted drug delivery.