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| Enrolment Number | |
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Bina Chow of Gentral Library Girijanar University Winter, 2024 Hatknowapara Azara Ghr 17

M.Pharm 2nd Semester Examination

Molecular Pharmaceutics

Course Code: MPH201T

Full Marks - 75

Time -3 hours

(The figure in the margin indicates full marks for the questions)

i. Answers the followings (Limit 50 words)

 $(10 \times 2 = 20)$

- 1. Relate the EPR effects with the targeting of drug to tumor tissue.
- 2. Analyze the role of cholesterol as a stabilizing agent in liposome formulations.
- 3. Aquasome are nano sized water droplets-explain.
- 4. Suggest a method for preparing gelatin Nano particles.
- 5. Explain importance of PDI and Surface charge in liposomal evaluation.
- 6. Enumerate the preparation technique of proniosome.
- 7. Identify commonly employed polymers in the preparation of nanoparticles.
- 8. Discuss the methodologies for distinguishing between oligo and multilamellar liposomes.
- 9. Name some novel excipients used in inhalation drug delivery.
- 10. Explain passive drug targeting with an example.

ii. Answer any seven questions (Limit 500 words)

 $(7 \times 5 = 35)$

- 1. Explain the role of tumor microenvironment in drug targeting.
- 2. Enumerate the production and use of apatamers in drug delivery.
- 3. Explain active targeting strategies for drug delivery to tumor site.
- 4. Enumerate the preparation of liposome by DRV method and its advantages.
- 5. Describe post formulation processing of nanoparticles.
- 6. Enumerate the preparation of Solid lipid nano particles.
- 7. Describe method of preparation of monoclonal antibodies using hybridoma technology
- 8. Intranasal route is a promising pathway to brain targeting- Explain with example.
- 9. Discuss the evaluation parameters of phytosome.

iii. Answer any two questions (Limit 1200 words)

 $(2 \times 10 = 20)$

- 1. Describe various strategies for brain specific drug delivery.
- 2. Explain the formulation techniques of microparticles.
- 3. Discuss various strategies of drug targeting.