

FACULTY OF PHARMACY

**M. Pharmacy (Pharmaceutics) II-Semester (PCI) (Suppl.) Examination,
January 2020**

**Subject: Molecular Pharmaceutics
(Nano Technology and Targeted Drug Delivery Systems)**

Time: 3 Hrs**Max. Marks: 75****Note: Answer any Five Questions. All Questions Carry Equal Marks.**

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| 1 | (a) Define drug targeting? What are the ideal characteristics of a carrier? | 6 |
| | (b) Explain different types of drug targeting in detail? | 9 |
| 2 | Explain different types of tumor targeting methods in detail? | 15 |
| 3 | (a) Explain various transport mechanisms across Blood brain barrier? | 5 |
| | (b) Describe in detail invasive and non-invasive brain targeting methods? | 10 |
| 4 | (a) Describe hybridoma technology of Mab preparation? | 8 |
| | (b) How will you characterize monoclonal antibodies? | 7 |
| 5 | (a) What are liposomes? Explain the role of cholesterol in the preparation of liposomes? | 5 |
| | (b) Explain any five (5) methods of preparation of liposomes? Add a note on fate of liposomes? | 10 |
| 6 | What are aquasomes? Describe in detail method of preparation and characterization of aquasomes? | 15 |
| 7 | (a) What are aerosols? Explain various propellants used in the manufacturing of aerosols | 7 |
| | (b) Describe in detail evaluation methods of nasal drug delivery system? | 8 |
| 8 | (a) What are gene drug delivery systems? Explain in detail viral and non viral gene transfer methods? | 9 |
| | (b) Write a note on liposomal gene drug delivery system? | 6 |
