

Code No. 13163/PCI

**FACULTY OF PHARMACY****M. Pharmacy (Pharmaceutics) II-Semester (PCI) (Suppl.) Examination, February 2019****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.**

1. a. What are the ideal properties of a carrier? (5)  
b. Explain different types of drug targeting with examples? (10)
2. a. What are the limitations of drug targeting to tumor? Explain EPR targeting? (7)  
b. What are the active targeting methods to target tumor? (8)
3. a. Explain blood brain barrier? What are the factors affecting drug transport across the BBB? (6)  
b. Explain various non-invasive targeting methods to brain? (9)
4. a. Describe in detail various methods of preparation of microspheres? (10)  
b. Explain the drug release mechanism from microspheres? (5)
5. a. Explain in detail nasal drug delivery system? (10)  
b. Write a note on preparation of Monoclonal antibodies? (5)
6. a. What are aerosols? Explain various propellants used in the manufacturing of Aerosols. (7)  
b. Explain different methods to characterize aerosols? (8)
7. a. Define gene therapy? Explain few diseases targeted for treatment using gene drug delivery system. (9)  
b. Explain aptamers role in targeted cancer therapy? (6)
8. Write a note on following  
a. Stealth liposomes  
b. Phytosomes  
c. Aquasomes (15)

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