

**Subject Code: CEU2A**

**M. Pharm II Semester [R05] Regular/Supplementary Examinations, Dec 2013**

**ADVANCES IN DRUG DELIVERY SYSTEMS**

**(Pharmaceutics)**

**Time: 3 Hours**

**Max Marks: 60**

**Answer any FIVE questions  
All questions carry EQUAL marks**

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1. (a) What are the different approaches to prepare implantable therapeutic systems.  
(b) Explain the mechanism of drug delivery through iontophoresis.
2. Discuss the formulation considerations of protein delivery. Add a note on the stability problems of protein delivery systems and means to overcome them.
3. (a) Mention different methods employed for drug entrapment in erythrocytes. Explain electrical breakdown method.  
(b) write the applications of liposomes.
4. (a) Explain the preparation of monoclonal antibodies.  
(b) Discuss the various techniques used in the preparation of microspheres.
5. Discuss the barriers for absorption of drugs through lungs. Explain the advantages and applications of this route.
6. (a) Write the role of blood brain barrier in drug transport. Discuss the approaches used for brain targeting.  
(b) Write short notes on targeting to eye.
7. (a) Write notes on targeting to lysosomal storage diseases.  
(b) Write notes on receptor based approaches for macrophage targeting.
8. Write in detail about immunoglobulin targeting to cancers of lymphoid origin.

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