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M. PHARM. (SEM-II)
CARRY OVER EXAMINATION 2016-17
RECENT ADVANCES IN DRUG DELIVERY SYSTEM

Time : 3 Hours

Max. Marks : 100

Note : Be precise in your answer. In case of numerical problem assume data wherever not provided.

1. **Attempt any Two parts of the following:** **2 × 10 = 20**
- (a) Discuss mathematical model for oral controlled drug delivery system.
 - (b) Elaborate mechanism of nasal controlled release system and justify its importance.
 - (c) Give pharmacokinetic and physicochemical factors affecting sustained release formulation.
2. **Attempt any Two parts of the following:** **2 × 10 = 20**
- (a) Discuss various principles for development of transdermal drug delivery system.
 - (b) Write a detail note on neutraceuticals.
 - (c) Classify various types of targeted drug delivery systems with suitable examples and explain the targeting mechanism.
3. **Attempt any Two parts of the following:** **2 × 10 = 20**
- (a) Liposomes
 - (b) Prodrug
 - (c) Microspheres.
4. **Attempt any Two parts of the following:** **2 × 10 = 20**
- (a) Resealed Erythrocytes
 - (b) Niosomes
 - (c) Nanoparticles
5. **Write short notes on any two:** **2 × 10 = 20**
- (a) Ionophoresis
 - (b) Fast Release drug delivery systems
 - (c) Antibodies as drug delivery systems.