Roll No ...

MPY - 202 (PCS)

M.Pharmacy II Semester

Examination, December 2015

Novel Drug Delivery System - I

(Advanced Pharmaceutics - II)

Time : Three Hours

Maximum Marks: 70

Note: Attempt any five questions. Each question carry equal marks.

1. Enumerate the properties desired of a drug candidate for formulation in oral sustained release dosage forms. Enumerate the approaches that can be employed for formulating oral sustained release dosage forms. Justify the use of few polymers used for this purpose along with specific examples.

2. What are osmotic release tablets? Enlist the ingredients used in these tablets. Mention the advantages of these tablets over sustained release tablets.

3. a) Discuss the mechanism for mucoadhesion and give examples of mucoadhesives.
   b) Comment on the biocompatibility tests for implantable polymers.

4. a) What are differences between liposomes, niosomes and ethosomes in terms of formulation ingredients? Enumerate the characterization parameters for these dosage forms.

   b) Discuss the approaches used for peptide delivery.

5. Highlight the need for formulating pH independent release dosage forms. Mention the approaches and polymers used for this purpose.

6. a) What are microemulsions? Mention the formulation strategy and applications of microemulsions.
   b) What is difference between iontophoresis and electroporation? What is the rationale for selecting drug to be delivered by these methods?

7. Describe various approaches and applications with special reference to colon specific delivery of drugs.

8. Discuss the followings :
   a) Absorption of drugs through skin
   b) Ocular inserts

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