



RO-5515

**M. Pharm. (Part-II) Examination**  
**May / June – 2010**  
**421 - Novel Drug Delivery Systems**

Time : Hours]

[Total Marks : 70

**Instructions :**

(1)

नीचे दृशावेक निशानीवाणी विगतो उत्तरवाडी पर अवश्य कपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="M. Pharm. (Part-2)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="421 - Novel Drug Delivery Systems"/>	<input type="text"/>
Subject Code No. : <input type="text" value="5"/> <input type="text" value="5"/> <input type="text" value="1"/> <input type="text" value="5"/>	<input type="text"/>
Section No. (1, 2,.....): <input type="text" value="Nil"/>	<input type="text"/>
	Student's Signature

(2) All questions carry **equal** marks.

(3) Attempt only **seven** questions.

- 1 (a) Why particle being coated ? Explain. Briefly discuss the air suspension method for preparation of microcapsules.  
(b) Write the applications of capsule shell in development of modified release dosage forms.
- 2 (a) Describe the various formulation factors affecting performance of osmotic drug delivery system.  
(b) Explain principle of controlled porosity osmotic pump and describe its formulation components.
- 3 Describe the various target sites for Bioadhesive formulations.
- 4 Compare and contrast the following :  
(a) Iontophoresis and Sonophoresis  
(b) Liposomes and Niosomes.
- 5 (a) Explain the multiparticulate floating dosage forms.  
(b) Describe the in vivo method for evaluation of gastroretentive dosage forms.

- 6 Give the rationale for the development of oral colon specific drug delivery system. Describe briefly the microbially triggered system for targeting drugs to colon.
  - 7 Briefly discuss the pharmaceutical devices for following :
    - (a) Transdermal drug delivery
    - (b) Ocular drug delivery.
  - 8 Discuss the various modern approaches for taste masking of pharmaceuticals.
  - 9 Write a note on herbal pharmaceutical dosage forms.
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