

SARDAR PATEL UNIVERSITY

M. Sc. Pharmaceutical Chemistry (Semester-IV) Examination

Monday, 04/04/2014; Time-02:30 PM to 05:30 PM

SUBJECT CODE: PS04CPCH01

SUBJECT TITLE: Advances in Pharmaceutical Technology and Drug Delivery systems

Maximum Marks: 70

Note: All the questions are compulsory.
Figure to the right indicates mark of the question.

Q-1 Choose the appropriate answer of the following [8×1] 08

1. NLC is abbreviation of:

a. Nanostructured liquid carriers	b. Nanostructured lipid carriers
c. National laboratories of Canada	d. None
2. Niosomal encapsulation enhances

a. Drug delivery	b. Drug toxicity
c. A and B Both	d. None of the above
3. The three basic principles of packaging are:
 - a. Protection, containment and identification
 - b. Identification, containment and labeling
 - c. Labeling, containment and tamper proofing
 - d. Containment, protection and tamper proofing
4. MES stands for.
 - a. Manufacturing Execution System
 - b. Manufacturing Element System
 - c. Malfunctioning Execution System
 - d. None
5. Which polymer has short degradation time

a. PLA	b. PCL	c. PDLA	d. 50:50 PLGA
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6. Which of the following materials are used in pharmaceutical packaging?

a. Glass	b. Plastic	c. Metal	d. All the mentioned
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- a. Controlled Drug Delivery Systems

a. Reduced drug level fluctuations	b. Enhance Therapeutic Action
c. Eliminate Dangerous Side Effects	d. None
7. Sterile water for nasal drops should store in:

a. Type-1	b. Type-2	c. Both a & b	d. None
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Q-2 Short Answer type questions. (Any seven) [7X2] 14

1. Enlist various types of surfactants use in preparation of advance dosage form
2. Describe the criteria for fast dissolving drug delivery system
3. Describe the use of automation in process.
4. What are the Function of packaging?

5. Describe DUROS infusion implants.
 6. Describe the advantages of transdermal drug delivery system?
 7. What is meant by second order targeting?
 8. What are the major advantages of Niosomes?
 9. Enlist cellulose based polymers.
- Q3. A. Write a note on important technologies for fast dissolving tablets with suitable example. 06
- B. Describe lyophilization and tablet molding techniques for preparing fast dissolving tablets. 06
- OR
- B. Discuss the evaluation of fast dissolving tablets. 06
- Q4. A. Classify the various types of polymers used in making plastic containers for pharmaceutical packaging with its characteristics and limitations. 06
- B. Discuss in detail about the various packing type for pharmaceutical dosage form. 06
- OR
- B. Describe the approach to understand the process in pharmaceutical industry and elaborate the ERP process flow. 06
- Q5. A. What are the major factors influencing the performance of sustained released product 06
- B. Brief the design and fabrication of oral controlled drug delivery system. 06
- OR
- B. Write a note on Guar gum. 06
- Q6. A. Write note on Transdermal Drug Delivery System. 06
- B. Describe the kinetic of transdermal permeation. 06
- OR
- B. Write a note on liposome mediated drug delivery. 06
