

**Shree Manibhai Virani and Smt. Navalben Virani Science College (Autonomous), Rajkot**  
Affiliated to Saurashtra University, Rajkot

**SEMESTER END EXAMINATION NOVEMBER - 2017**

**M.Sc. Analytical Chemistry / M.Sc. Organic Chemistry**

**16PCEAC01 / 16PCEOD02 – INDUSTRIAL FORMULATION DEVELOPMENT**

*Duration of Exam – 3 hrs*

*Semester – III*

*Max. Marks – 70*

**Part A (5X2= 10 marks)**

Answer **ALL** questions

1. What is enteric tablet? What are its advantages?
2. What are the advantages of film coating? Give examples of film coating materials.
3. Name the different routes of parenteral drug administration.
4. Define diluents and binders with examples.
5. Define lamination & orange peel effect.

**Part B (5X5= 25 marks)**

Answer **ALL** questions

- 6a. Define & classify Tablets with example. Give various advantages & disadvantages of Tablets.  
**OR**
- 6b. What is granulation? Describe wet granulation technique in detail with an equipment.
- 7a. Write a note on friability test for tablet and apparatus used for the same.  
**OR**
- 7b. Define & classify semisolid dosage form. Write down various mechanism of penetration of drug through skin.
- 8a. Define capsule. Write a note on formulation of hard gelatin capsule shell.  
**OR**
- 8b. Differentiate Cold cream and Vanishing Cream. Define SPF. What are the importance of sun protective factor in sunscreen preparation?
- 9a. Write a short note on disintegration test. Describe various disintegration time for various types of tablet according to IP.  
**OR**
- 9b. Write down advantages and disadvantages of buccal drug delivery systems. List out various polymers used for same.
- 10a. What are various approaches of gastro retentive drug delivery system (GRDDS)? Briefly explain floating drug delivery system (FDDS).  
**OR**
- 10b. Write a note on dentifrice.

**Part C (5x7= 35 marks)**

Answer **ALL** questions

11a. Discuss about various evaluation parameter of capsules.

**OR**

11b. Define cosmetics. Discuss about hair shampoo and conditioner.

12a. With a diagram explain the formulation of soft gelatin capsule.

**OR**

12b. How to select the drug candidate for colon targeted drug delivery systems. Write a note on colon targeted drug delivery system.

13a. Define coating. Write a detail note on sugar coating process.

**OR**

13b. Enlist oral liquids dosage forms. Describe in details about solvents used in oral liquid dosage forms.

14a. Define preservative with example. Explain types of additives used in liquid dosage forms.

**OR**

14b. Discuss various evaluation test of sterile dosage forms.

15a. Discuss about various additives/excipients used in the formulation of tablets with examples.

**OR**

15b. Explain various types of vehicle used for preparation of parenteral dosage forms.

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