

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B. Pharm. – SEMESTER – VIII • EXAMINATION – WINTER 2013**

**Subject Code: 280002**

**Date: 13-09-2013**

**Subject Name: Pharmaceutical Technology- II**

**Time: 03.00 am - 06.00 pm**

**Total Marks: 80**

**Instructions:**

- 1. Attempt any five questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

- Q.1** (a) Differentiate: capping and lamination. **02**  
(b) Explain hypodermic tablets. Describe disintegration test as per IP. **04**  
(c) Compare and contrast the process of wet granulation and dry granulation for tablets. **05**  
(d) Describe formulation and evaluation of mouth dissolving tablets. **05**
- Q.2** (a) Comment: Tablet hardness is an absolute indicator of tablet strength. **02**  
(b) What are objectives of enteric coating? Describe polymers used for enteric coating. **04**  
(c) Describe defects in coated tablets with remedial measures. **05**  
(d) What are turrets? Describe compression cycle for rotary tablet machine. **05**
- Q.3** (a) What is bloom strength? How is it measured? **02**  
(b) What are vegetable capsules? How are they differing from gelatin capsules? **04**  
(c) Describe the finishing of hard gelatin capsules. Give the approximate fill volume of 00 and 000 size capsules. **05**  
(d) What are soft gelatin capsules? Describe rotary die process for their preparation. **05**
- Q.4** (a) Comment: Storage condition for capsules is very critical. **02**  
(b) Explain microspheres and microcapsules. Describe their significance in drug delivery. **04**  
(c) What is coacervation phase separation? Which are the techniques to achieve phase separation? **05**  
(d) Describe biodegradable and non-biodegradable polymers used in microcapsules. **05**
- Q.5** (a) What is anti-dandruff shampoo? Name two anti-dandruff agents. **02**  
(b) Differentiate cold cream and vanishing cream. **04**  
(c) What are sunscreen preparations? Discuss their formulation and evaluation in brief. **05**  
(d) Describe the formulation and evaluation of dentifrice. **05**
- Q. 6** (a) What is PET? Why is it eco-friendly? **02**  
(b) Discuss the sugar coating steps with their purposes. **04**  
(c) What is tamper evident package? Describe blister package. **05**  
(d) Describe glass as a material for pharmaceutical packaging. Explain water attack test. **05**
- Q.7** (a) What is validation? Name the types of validation. **02**  
(b) What is SOP? Describe its significance. **04**  
(c) Describe the validation of an autoclave. **05**  
(d) What is documentation? Describe batch manufacturing records. **05**

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