

GUJARAT TECHNOLOGICAL UNIVERSITY
B. PHARM. - SEMESTER – VIII EXAMINATION – OCTOBER 2012

Subject code: 280002**Date: 27/10/2012****Subject Name: Pharmaceutical Technology-II****Time: 02.30pm - 05.30pm****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) What is roller compactor? Draw label diagram, discuss its working and process variable affecting on its performance. **06**
- (b) Answer the following question **05**
1. Explain “Orange peel effects” on coating
 2. What are “Sugartab”, “Dipac”, and “Nu tab”? give its composition
 3. Give the disintegration test for enteric coated tablets as per USP.
 4. What are “Anti frictional agents use in tablet”? give its functionalities with example
 5. Define dental cone
- (c) Discuss the variables to be controlled in pan-spray film coating process **05**
- Q.2** (a) Differentiate between direct compression and wet granulation methods for tablet **06**
- (b) Comment on following statement **05**
1. Mannitol is used as diluent in chewable tablet.
 2. Anhydrous lactose has the advantage over the lactose.
 3. Quantity of binders should be carefully added in tablet preparation.
 4. Effervescence tablet should be packed in hermetically seal container.
 5. Lactose is widely used diluent in tablet
- (c) Discuss the compression related problem in tablet and give suitable suggestion to overcome it. **05**

| | | | |
|-------------|-----|--|-----------|
| Q.3 | (a) | Explain term microcapsule. Discuss in detail phase coacervation phenomena for preparation of microcapsules | 06 |
| | (b) | Enumerate various evaluation parameters for microencapsulation. Discuss application of biodegradable polymer in microcapsules | 05 |
| | (c) | Write note on wurster process for microcapsule | 05 |
| Q.4 | (a) | Answer the following questions 1. Explain the term microsphere and give its importance 2. What is bloom strength of gelatin? Explain it 3. Define & explain “base adsorption” of the solid in soft gelatin capsule. | 06 |
| | (b) | Discuss the evaluation parameters for mouth dissolving tablet | 05 |
| | (c) | Give the reasons for enteric coating of tablet. Enlist enteric and non enteric film former materials. Write note on plasticizer. | 05 |
| Q.5 | (a) | Discuss following with respect to GMP 1. Personal 2. Material 3. Equipment | 06 |
| | (b) | Give important of documentation in pharmaceutical manufacturing. Write detail account of batch manufacturing records. | 05 |
| | (c) | Give the advantages of pharmaceutical validation? How will you perform validation of steam sterilizer? | 05 |
| Q. 6 | (a) | Define pharmaceutical package. Enlist the criteria for selection of package type and packaging material. Classify the packaging materials. | 06 |
| | (b) | What are the importances of sun protective factor (SPF) in sunscreen preparation? Discuss the formulation and evaluation of sunscreen. | 05 |
| | (c) | Give the evaluation test for closure as per IP. Write note on temper evident packaging. | 05 |
| Q.7 | (a) | Discuss regulatory requirements in pharmaceutical packaging. | 06 |
| | (b) | Distinguish between vanishing cream and cold cream with examples. | 05 |
| | (c) | Give the formulation and evaluation of dentifrice | 05 |
