

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**DIPLOMA PHARMACY YEAR-1 • EXAMINATION – SUMMER-2019**

**Subject Code: 410001****Date: 27/05/2019****Subject Name: Pharmaceutics - I****Time: 02:30 PM TO 05:30 PM****Total Marks: 80****Instructions:**

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

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|-------------|------|---|-----------|
| <b>Q.1</b>  | (a)  | Define sterilization. Enumerate different methods of sterilization and discuss any one in detail.                         | <b>06</b> |
|             | (b)  | Discuss defects in tablet manufacturing in detail.  | <b>05</b> |
|             | (c)  | Define Dosage form. Classify them giving suitable example/s.  | <b>05</b> |
| <b>Q.2</b>  | (a)  | Define filtration. Discuss Filter press in detail.  | <b>06</b> |
|             | (b)  | Write a note on Ball mill with neat and labeled diagram.  | <b>05</b> |
|             | (c)  | Write principle, construction, and working of Cyclone separator.  | <b>05</b> |
| <b>Q.3</b>  | (a)  | Define evaporation. Discuss factors affecting evaporation process.  | <b>06</b> |
|             | (b)  | Define tablet. Give advantages and disadvantages of tablet dosage form.   | <b>05</b> |
|             | (c)  | Discuss objectives and various mechanisms of size reduction process.  | <b>05</b> |
| <b>Q.4</b>  | (a)  | Enumerate different types of tablets. Discuss granulation techniques for the preparation of tablets.                      | <b>06</b> |
|             | (b)  | Define extraction process. Write a note on continuous hot percolation process.  | <b>05</b> |
|             | (c)  | Discuss Tray dryer OR Vacuum dryer in detail.   | <b>05</b> |
| <b>Q.5</b>  | (a)  | Define distillation. Enlist different distillation process and discuss any one in detail.                                 | <b>06</b> |
|             | (b)  | Discuss various evaluation tests for tablet in detail.  | <b>05</b> |
|             | (c)  | Discuss Evaporating still OR Evaporating pan in detail.   | <b>05</b> |
| <b>Q. 6</b> | (a)  | Differentiate followings: (Any Two)<br>1. Active and passive immunity<br>2. Syrup IP and Syrup USP<br>3. Vaccine and Sera | <b>06</b> |
|             | (b)  | Discuss enteric coating OR sugar coating of tablet in detail.   | <b>05</b> |
|             | (c)  | Write application of sterilization process in pharmacy.   | <b>05</b> |
| <b>Q.7</b>  |      | Write short notes on followings:- (Any FOUR)  | <b>16</b> |
|             | i)   | Factors affecting size reduction  |           |
|             | ii)  | Packaging of pharmaceuticals  |           |
|             | iii) | Colloid mill and hand homogeniser   |           |
|             | iv)  | Novel drug delivery systems   |           |
|             | v)   | Indian Pharmacopoeia  |           |
|             | vi)  | Manufacturing of hard gelatin capsule   |           |

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