

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**M. PHARM. - SEMESTER – I • EXAMINATION – WINTER 2012**

**Subject code: 910202****Date: 11/01/2013****Subject Name: Industrial Pharmacy Practice****Time: 10.30 am - 01.30 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) Describe the factors to be considered in selection of location for pharmaceutical factory.       | <b>06</b> |
|            | (b) Discuss personnel facilities required in pharmaceutical industry.                                | <b>05</b> |
|            | (c) Describe HVAC as utility service in pharmaceutical manufacturing.                                | <b>05</b> |
| <b>Q.2</b> | (a) Describe departmental layout for semi solid dosage forms.  | <b>06</b> |
|            | (b) Discuss the important factors for material selection in pharmaceutical plant construction.       | <b>05</b> |
|            | (c) Enlist the equipments required for solid dosage forms. Describe fluidized bed drier              | <b>05</b> |
| <b>Q.3</b> | (a) Discuss the equipments required in manufacturing of oral liquid dosage forms as per schedule- M. | <b>06</b> |
|            | (b) Draw the layout of material flow in parenteral manufacturing department.                         | <b>05</b> |
|            | (c) Give a layout of manufacturing area for cosmetics.   | <b>05</b> |
| <b>Q.4</b> | (a) What is the significance of SOP? Describe the contents of SOP.                                   | <b>06</b> |
|            | (b) What is clean in place? Write SOP for cleaning and disinfection of class 100 clean area.         | <b>05</b> |
|            | (c) Write SOP for validation of moist heat sterilizer.   | <b>05</b> |
| <b>Q.5</b> | (a) Explain validation. Discuss the contents of validation protocol.                                 | <b>06</b> |
|            | (b) What is documentation? Describe Batch Manufacturing Record.                                      | <b>05</b> |
|            | (c) Discuss Batch Packing Record.  | <b>05</b> |
| <b>Q.6</b> | (a) What is cGMP? Discuss its significance in pharmaceuticals in brief.                              | <b>06</b> |
|            | (b) What are the objectives of production planning and material control?                             | <b>05</b> |
|            | (c) Write about inventory control of raw materials.  | <b>05</b> |
| <b>Q.7</b> | (a) Discuss the parameters to be considered in tablet coating process scale up.                      | <b>06</b> |
|            | (b) Write in brief about SUPAC-IR.   | <b>05</b> |
|            | (c) Discuss process scale up with different types of batches.  | <b>05</b> |

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