

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

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

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**M.Pharm Semester –I Examination Feb. - 2012**

**Subject code: 910108**

**Date: 13/02/2012**

**Subject Name: Industrial Pharmacy- I**

**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) Enlist the factors to be considered while selecting a site for Pharma. Plant.                                                              | <b>06</b> |
|             | (b) Draw a simple layout of Pharma. Production plant along with F & D section. Write a note on personal facilities.                            | <b>05</b> |
|             | (c) What do you mean by utility services? Enlist them and write a note on any one of them in brief.                                            | <b>05</b> |
| <b>Q.2</b>  | (a) What do you mean by qualitative and quantitative layout for dosage form production?                                                        | <b>06</b> |
|             | (b) Draw the flow-sheet of semi-solid dosage form manufacturing                                                                                | <b>05</b> |
|             | (c) Discuss the selection criteria of material for plant construction, equipment design and capacity of it as per schedule M.                  | <b>05</b> |
| <b>Q.3</b>  | (a) Suggest important criteria to be incorporated in layout, equipment, process and documents to manufacture PVP-I <sub>2</sub> aerosol spray. | <b>06</b> |
|             | (b) What are the standards for powders? Classify them and suggest a list of equipments for manufacture of powder.                              | <b>05</b> |
|             | (c) Explain BMR, BPR and SOP for effervescent Powder                                                                                           | <b>05</b> |
| <b>Q.4</b>  | (a) Explain the role of HVAC system in phrama.plant.                                                                                           | <b>06</b> |
|             | (b) Discuss in brief the different components and their functions in HVAC system.                                                              | <b>05</b> |
|             | (c) Write a note on water contaminants and validation of water system.                                                                         | <b>05</b> |
| <b>Q.5</b>  | (a) Discuss the layout, equipments, Q.C., BMR., BPR., & SOP for nicotine patch.                                                                | <b>06</b> |
|             | (b) What is ISO 14644?                                                                                                                         | <b>05</b> |
|             | (c) How GMP does differ from cGMP?                                                                                                             | <b>05</b> |
| <b>Q. 6</b> | (a) What is Good Purchase Practice? , in the context of GMP program, Discuss the raw material and finished goods store.                        | <b>06</b> |
|             | (b) What is quality audit? How does the process of it is carried out?                                                                          | <b>05</b> |
|             | (c) What are GMP specifications for labeling and packaging control?                                                                            | <b>05</b> |
| <b>Q.7</b>  | (a)                                                                                                                                            | <b>06</b> |
|             | Define 'Control'. Discuss about GLP practices.                                                                                                 |           |
|             | (b) Write a note on distribution records.                                                                                                      | <b>05</b> |
|             | (c)                                                                                                                                            | <b>05</b> |
|             | Write a procedure for complains and recalls.                                                                                                   |           |

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