

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

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

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

**Subject Code: 270002**

**Date: 28-11-2013**

**Subject Name: Pharmaceutical Technology- 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.**

|             |     |                                                                                                   |           |
|-------------|-----|---------------------------------------------------------------------------------------------------|-----------|
| <b>Q.1</b>  | (a) | Explain the various types of additives which are used in liquid dosage formulations with examples | <b>06</b> |
|             | (b) | Describe the evaluation of Suspensions & Emulsions.                                               | <b>05</b> |
|             | (c) | Define & enumerate the advantages of micro-emulsions & multiple-emulsions.                        | <b>05</b> |
| <b>Q.2</b>  | (a) | Define Tincture, Extracts and Infusion with pharmaceutical examples.                              | <b>06</b> |
|             | (b) | What are the advantages of cold filling & pressure filling techniques in manufacturing aerosols.  | <b>05</b> |
|             | (c) | Write a short note on suppository & Gels.                                                         | <b>05</b> |
| <b>Q.3</b>  | (a) | Write a note on semi solid bases. Enumerate their selection & ideal requirements of bases.        | <b>06</b> |
|             | (b) | Explain the mechanism of drug penetration through skin.                                           | <b>05</b> |
|             | (c) | Mention the advantages & disadvantages of semi-solid dosage forms                                 | <b>05</b> |
| <b>Q.4</b>  | (a) | Define Aerosols. Explain briefly about propellants & classify.                                    | <b>06</b> |
|             | (b) | Write in details about the containers used in aerosols.                                           | <b>05</b> |
|             | (c) | Enumerate evaluating parameters of aerosols.                                                      | <b>05</b> |
| <b>Q.5</b>  | (a) | Write in detail about design and requirements for production area of sterile dosage formulations. | <b>06</b> |
|             | (b) | What are the sources of contamination & methods of prevention in sterile dosage formulations.     | <b>05</b> |
|             | (c) | Describe the design of aseptic area & importance of laminar flow bench.                           | <b>05</b> |
| <b>Q. 6</b> | (a) | Describe “Water for Injection” & its preparation and quality control measures.                    | <b>06</b> |
|             | (b) | What are the ideal requirements & formulations of sterile dosage formulations.                    | <b>05</b> |
|             | (c) | Write a note on formulation of ophthalmic dosage form.                                            | <b>05</b> |
| <b>Q.7</b>  | (a) | Discuss the evaluation techniques for sterile dosage formulations.                                | <b>06</b> |
|             | (b) | Explain the different types of containers & closures used in sterile dosage formulations.         | <b>05</b> |
|             | (c) | Describe the various methods of filling & sealing techniques used in parenterals.                 | <b>05</b> |

\*\*\*\*\*