

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

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

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**DIPLOMA PHARMACY - SEMESTER-I • EXAMINATION-SUMMER • 2014**

**Subject Code: 410002**

**Date: 22-05-2014**

**Subject Name: Pharmaceutical Chemistry-I**

**Time: 10:30 am - 01:00 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) | How Cyanide give its poisoning effect? Write antidotes used in this case and its mechanism of action.                                    | <b>06</b> |
|             | (b) | Write short note on Respiratory Stimulants.                                                                                              | <b>05</b> |
|             | (c) | Enlist the official compounds of Iron and Calcium. Write biological importance of Iodine.                                                | <b>05</b> |
| <b>Q.2</b>  | (a) | Give various concepts of Acids and Bases in brief.                                                                                       | <b>06</b> |
|             | (b) | Discuss Antioxidants with their mechanism and give its ideal characteristics.                                                            | <b>05</b> |
|             | (c) | Write peroration properties uses and assay of Boric acid.                                                                                | <b>05</b> |
| <b>Q.3</b>  | (a) | Comment on “Combination antacid preparations are advantageous than individual preparation”. Define antacids and give its classification. | <b>06</b> |
|             | (b) | Give properties, preparation, storage and different solutions of Iodine.                                                                 | <b>05</b> |
|             | (c) | Give the name of gases used as Inhalants and give storage condition of each.                                                             | <b>05</b> |
| <b>Q.4</b>  | (a) | Enlist major intra and extra cellular electrolytes. Discuss physiological acid base balance.                                             | <b>06</b> |
|             | (b) | Define terms i) Astringents ii) Desensitizing agents iii) Abrasives. Give properties, preparation & use of Sodium Acetate                | <b>05</b> |
|             | (c) | What is the content of Ringer lactate solution? Write note on ORS.                                                                       | <b>05</b> |
| <b>Q.5</b>  | (a) | Give biological effect of Radiation. Write G-M counter in detail.                                                                        | <b>06</b> |
|             | (b) | Discuss applications of Radiopharmaceuticals.                                                                                            | <b>05</b> |
|             | (c) | Define terms i) Achlorhydria ii) Buffers iii) Cathartics. Give use of i) Kaolin ii) Potassium Iodide                                     | <b>05</b> |
| <b>Q. 6</b> | (a) | Define Complexometric titration. What is the difference between Mohr’s method and Modified Volhad’s method for assay of sodium chloride. | <b>06</b> |
|             | (b) | Enlist the Sources of Impurity and its effect in pharmaceutical substances.                                                              | <b>05</b> |
|             | (c) | Define terms i) Protectives ii) Expectorants iii) Hyperkalemia iv) Emetics & v) Germicides.                                              | <b>05</b> |
| <b>Q.7</b>  | (a) | Give properties, preparation & use of i)Hydrochloric Acid ii)Potassium Permanganate iii)Sodium Fluoride.                                 | <b>06</b> |
|             | (b) | Give identification test for Aluminium and Bromide.                                                                                      | <b>05</b> |
|             | (c) | Write short note on Limit test of Arsenic.                                                                                               | <b>05</b> |

\*\*\*\*\*