

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA PHARMACY – SEMESTER – I • EXAMINATION – SUMMER 16

Subject Code: 410002**Date: 13.05.2016****Subject Name: Pharmaceutical Chemistry-I****Time: 10:30 AM TO 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

- Q.1** (a) Define Limit tests. Explain the limit test of Arsenic with labeled diagram and giving role of reagents used. **08**
- (b) Define Impurity. Enlist the various types of impurities. Write in brief about sources of impurities in pharmaceuticals. **08**
- Q.2** Explain the following terms (Give examples if any): **16**
- | | |
|---------------------------|------------------|
| (a) Buffer Capacity | (e) Purgatives |
| (b) Respiratory Stimulant | (f) Expectorants |
| (c) Achlorhydria | (g) Antiseptics |
| (d) Emetics | (h) Astringents |
- Q.3** (a) Define Antacids. Classify GIT agents with examples. Give the requirements for ideal Antacids. **08**
- (b) Define Topical agents. Classify them with examples. Give brief about the various preparations of Iodine. **08**
- Q.4** (a) Give the method of preparation and assay principle of Boric acid and Hydrogen peroxide. **06**
- (b) Define Antidotes. Discuss the mechanism of its action. **05**
- (c) Define Dehydration. Enlist various Major Intra and Extra Cellular Electrolytes. **05**
- Q.5** (a) Explain the storage and labeling condition for the Oxygen, Carbon dioxide and Nitrous oxide. **06**
- (b) Define Dental carries. Give the role of Fluoride and Phosphate in the dental hygiene. **05**
- (c) What are buffers? How they act? Give the mechanism of its action. **05**
- Q. 6** (a) Give the identification tests for following ions: **06**
- | | |
|---------------|--------------|
| (i) Carbonate | (iii) Sodium |
| (ii) Chloride | (iv) Nitrate |
- (b) Give the biological importance of Calcium and Iron. **05**
- (c) Give the principle and reactions involved in the limit test of Sulphate. **05**
- Q.7** Write a short note on following: **16**
- (a) Radio-opaque Contrast Media
 - (b) Geiger Muller Counter
 - (c) ORS
 - (d) Antioxidants