

GUJARAT TECHNOLOGICAL UNIVERSITY
Diploma Pharmacy – 1st Year Examination – OCTOBER 2012

Subject code: 410002**Date: 29-10-2012****Subject Name: Pharmaceutical Chemistry-I****Time: 2:30 pm – 5:30 pm****Total Marks: 80****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Discuss the source of impurities in pharmaceutical substances. **06**
(b) Explain the limit test of arsenic. **05**
(c) Define errors in analysis. **05**
- Q.2** (a) Define buffers. Give mechanism of buffer action and importance of buffer solution in pharmacy. **06**
(b) Explain Bronsted acid base theory. What are conjugate pairs of acid and base? **05**
(c) Give methods of preparation, properties and uses of hydrochloric acid. **05**
- Q.3** (a) Classify gastro-intestinal agents with examples. **06**
(b) Define antacids and explain one of the aluminum compounds as antacids. **05**
(c) Define antioxidants. List the compounds of sodium as antioxidants and give method of preparation of any one. **05**
- Q.4** (a) Define following terminology:- (Any three) **06**
I) Antiseptic II) Disinfectant III) Germicide IV) Bacteriostatic
(b) What are topical agents? Classify them with suitable examples. **05**
(c) Enlist the official preparations of iodine and give mechanism of action. **05**
- Q.5** (a) What are anticaries agents? Discuss the role of fluoride. **06**
(b) Give the storage condition of following gases. **05**
I) Carbon dioxide II) Nitrous oxide III) Oxygen
(c) Define expectorants. Discuss the role of ammonium compounds as respiratory stimulants. **05**
- Q.6** (a) Enlist major intra and extra cellular electrolytes. Discuss the physiological importance of sodium ion. **06**
(b) Write a short note on ORS. **05**
(c) What is haematinics? Give preparation, properties and uses of ferrous gluconate. **05**
- Q.7** (a) Write a note on geiger muller counter. **06**
(b) Define antidotes. Discuss mechanism of action of antidote poisoning. **05**
(c) Give identification test for chlorides and lead. **05**
