

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.

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| 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)
I) Antiseptic II) Disinfectant III) Germicide IV) Bacteriostatic | 06 |
| | (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.
I) Carbon dioxide II) Nitrous oxide III) Oxygen | 05 |
| | (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 |
