

Seat No.: _____

Enrolment No. _____

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

Subject Code: 2210002

Date: 01-01-2014

Subject Name: Pharmaceutical Chemistry-I (Inorganic Chemistry)

Time: 02.30 pm - 05.30 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) Write a detail note on sources of impurities in pharmaceutical chemicals. **06**
(b) What is meant by limit test? Write a note on limit test for Sulphate. **05**
(c) Write a note on complexing agent used in therapy. **05**
- Q.2** (a) Describe the following terms. **06**
1. Cathartics
2. Protectives
3. Astringent
(b) Define antimicrobial agents and classify them with examples. **05**
(c) Write a note on Geiger Muller Counters. **05**
- Q.3** (a) Define major intra and extra cellular electrolytes. Give physiological function of sodium and disease associated with it. **06**
(b) Write a note on physiological acid base balance. **05**
(c) Answer the followings: **05**
1. Justify the use of Citric acid in the limit test of iron.
2. Why do pharmacopoeias not prescribe limit test for chloride, sulphate and iron?
- Q.4** (a) Define essential and trace elements and give the biological role of iron. **06**
(b) Give applications of radioisotopes. **05**
(c) Give preparation and uses of following compound. **05**
1. Sodium chloride and dextrose injection
2. Potassium iodide
- Q.5** (a) Define antioxidants and give criteria for a substance to act as an antioxidant. **06**
(b) Explain the compound acting by protein precipitation and describe any one in detail. **05**
(c) Write a note on respiratory stimulants. **05**
- Q.6** (a) Write a detail note on dental products. **06**
(b) Define Antidotes and describe role of Kaolin. **05**
(c) Write a brief note on Sedatives with example. **05**
- Q.7** (a) Give the synonym of the following compounds. **06**
1. Ringer's injection
2. Gypsum
3. Epsom Salt
4. Bleaching powder
5. Lugol's solution
6. Precipitated chalk
(b) Describe electrolyte combination therapy with suitable examples. **05**
(c) Give synonym, preparation and uses of H_3PO_2 . **05**
