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. 1. Cathartics 2. Protectives 3. Astringent	**06**
	(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: 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?	**05**
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. 1. Sodium chloride and dextrose injection 2. Potassium iodide	**05**
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. 1. Ringer's injection 2. Gypsum 3. Epsom Salt 4. Bleaching powder 5. Lugol's solution 6. Precipitated chalk	**06**
	(b)	Describe electrolyte combination therapy with suitable examples.	**05**
	(c)	Give synonym, preparation and uses of H_3PO_2.	**05**

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