Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. – SEMESTER – I • EXAMINATION – SUMMER 2013

Subject Code: 2210002 Date: 13-05-2013

Subject Name: Pharm 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)	Discuss the source of impurities in pharmaceutical substances.	**06**
	(b)	Define Limit test. Explain the limit test of arsenic.	**05**
	(c)	Write a note on chelating agents used in therapy.	**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 explains 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) Filter-Aid III) Adsorbent IV) Presevative	**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)	Discuss biological importance of calcium ions and their deficiency symptoms.	**05**

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