Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY D. Pharm. – SEMESTER – I • EXAMINATION – WINTER • 2014

3		Date: 24-12-2014	
Time:		e: Pharmaceutical Chemistry - I am - 01:30 pm	Total Marks: 80
mstru	1. At 2. Ma	tempt any five questions. ake suitable assumptions wherever necessary. gures to the right indicate full marks.	
Q.1	(a)	Define the following terms. 1. Pharmacopoeia 2. Buffer capacity 3. Normality 4. Water for injection 5. Indicator	06
	(b)	 Official compound Enlist major intra and extra cellular electrolytes. Disc important biological function of sodium ion and bicat the body. 	
	(c)	Write a note on respiratory stimulants.	05
Q.2	(a)	Define limit test. Write the principle, reaction and pro	ocedure 06
	(b)	involved in the limit test of iron as per IP. How iodine is obtained and purified from natural sou various official preparations of iodine.	
	(c)	Write in brief about sources of impurities in pharmac	euticals. 05
Q.3	(a) (b) (c)	Give the chemical name and uses of following. 1. Precipitated chalk 2. Epsom salt 3. Rochelle salt 4. Alum 5. Chlorinated lime 6. Lugol's solution What are topical agents? Classify topical agents, givi Explain the limit test of arsenic with labelled diagram	
Q.4	(a)	Distinguish between 1. Iodometry and Iodimetry titration 2. Oxidizing agent and reducing agent 3. Poison and antidote	06
	(b)	Classify dental products with suitable examples. Disc fluoride in preventing tooth carries.	cuss the role of 05
	(c)	Write about the various mechanism of action of inorgantimicrobial agents with examples.	ganic 05
Q.5	(a)	Discuss assay principle and uses of following. 1. Hydrogen peroxide 2. Boric acid 3. Silver nitrate	06
	(b)	Compare properties of alpha, beta and gamma rays. V	Write about 05

		industrial applications of radioactivity.	
	(c)	Write a note on dentifrices.	05
Q. 6	(a)	Define antacid. Classify it with suitable examples. Write about ideal characteristics of antacids.	06
	(b)	Write a note on Lewis theory of acid base.	05
	(c)	Enlist methods for measurement of radioactivity. Write about Geiger muller counter.	05
Q.7	(a)	Define following terms with examples. 1. Emetic 2. Astringent 3. Inhalant 4. Expectorant	06
	(b)	Write a note on physiological acid base balance.	05
	(c)	Define antioxidant. Give various important criteria for selection of antioxidant. Enlist various antioxidants with chemical formula.	05
