Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. – SEMESTER – I • EXAMINATION – WINTER • 2015

Subject Code: 2210002 **Date: 31-12-2015**

Subject Name: Pharmaceutical Chemistry – I (In organic Chemistry)

Time: 10:30 am - 01:30 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)	Comment on the following sentences. 1. pH plays important role in limit test of iron. 2. Dilute acetic acid is used in the limit test of lead. 3. Granulated zinc is used in the limit test of arsenic.	**06**
	(b)	What do mean by hard water. Explain types of hardness along with methods for removal.	**05**
	(c)	Write a note on radioactive rays.	**05**
Q.2	(a)	Give principle of assay of 1. Ammonia 2. Potassium permanganate	**06**
	(b)	Define buffer capacity. Explain mechanism of buffer action along with suitable example.	**05**
	(c)	What is meant by physiological buffers? Describe the mechanism of maintaining pH of blood.	**05**
Q.3	(a)	Give difference between 1. Assay and limit test 2. Cathartic and purgative 3. Emetic and expectorant	**06**
	(b)	Give preparations and uses of any two orally used antacids giving examples of their marketed preparations.	**05**
	(c)	Write informative note on "Anti oxidant". Explain preparation, properties and uses of sodium thiosulphate.	**05**
Q.4	(a)	Write a note on 1. Cyanide poisoning. 2. Complexing and chelating agents.	**06**
	(b)	Write the preparation, uses and assay principle of the Lunar caustic.	**05**
	(c)	Discuss the biological significance of calcium.	**05**
Q.5	(a)	Comment on the following sentences: 1. Magnesium sulphate is used in the assay of calcium lactate. 2. Povidone – iodine is better than tincture iodine.	**06**
	(b)	Write Preparation and uses of following 1. Calamine 2. Selenium sulfide	**05**
	(c)	Write about various haematinic preparations.	**05**

Q. 6	(a)	Explain importance of followings with examples 1.ORS 2. Preservatives 3. Buffers	**06**
	(b)	Define following terms with examples. 1. Astringent 2. Bactericidal 3. Disinfectant 4. Protectives 5. Sclerosing agent	**05**
	(c)	Write the storage condition, uses and assay principle of Hydrogen peroxide.	**05**
Q.7	(a)	Give method preparation and category of following compounds. 1. Epsom salt 2. Graham's salt 3. Rochelle salt	**06**
	(b)	Write a note on anticaries agents.	**05**
	(c)	Enumerate different methods of measurement of radioactivity and explain in detail any two.	**05**

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