Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.PHARM – SEMESTER – 1- EXAMINATION –WINTER - 2018

Subject Code:210003 **Date: 03/01/2019**

Subject Name: Pharm Chemistry - I

Time:10:30 AM TO 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)**	Give the chemical formulae, preparation and uses of silver nitrate, zinc chloride and sodium bicarbonate.	**06**
	(b)	Explain the Lowry-Bronsted acid base theory.	**05**
	(c)	Give the biological importance of complexing and chelating agents.	**05**
Q.2	**(a)**	Explain the principle involved in limit test for arsenic. Draw a neat and cleaned diagram of apparatus used in the limit test for arsenic.	**06**
	(b)	Define antacid. Give the ideal requirements of antacid.	**05**
	(c)	Define the following terms: (i) Limit test (ii) Buffer (iii) Laxatives (iv) Radioisotopes (v) Cathartics.	**05**
Q.3	**(a)**	Define and classify Gastrointestinal agents with examples. Give the preparation of calcium carbonate.	**06**
	(b)	Explain iodine and its preparation along with their composition.	**05**
	(c)	Write a note on: (i) Astringents (ii) Expectorants	**05**
Q.4	**(a)**	Enlist the various essential and trace elements. Write a short note on haematinics.	**06**
	(b)	Write a short note on: (i) Sclerosing agents (ii) Cyanide poisoning.	**05**
	(c)	Write a short note on anesthetics. Give the storage and labeling conditions for oxygen.	**05**
Q.5	**(a)**	Classify topical agents with examples. Give the preparation and assay of potassium permanganate.	**06**
	(b)	Write a short note on respiratory stimulants and emetics.	**05**
	(c)	Write a short note of physiological buffers.	**05**
Q. 6	**(a)**	Define anticarries agents. Explain the role of fluoride and phosphate in dental products.	**06**
	(b)	What are the precautions to be taken while handling and storage of radio-pharmaceuticals?	**05**
	(c)	Explain the mechanism of action of antimicrobial agents.	**05**
Q.7	**(a)**	Define antidotes. Explain the mechanism of action of antidotes.	**06**
	(b)	Define radio-pharmaceuticals. Draw a labeled diagram of GM counter.	**05**
	(c)	Enlist the different units for the measurement of radioactivity. Give the clinical applications of radio-pharmaceuticals.	**05**

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