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.

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