

Seat No.: _____

Enrolment No. _____

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

Subject Code: 2210002

Date: 30-12-2014

Subject Name: Pharmaceutical Chemistry-I (Inorganic 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.

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|-------------|---|-----------|
| Q.1 | (a) Write a note on Gutzeit test. | 06 |
| | (b) Classify topical agents. Write preparation of potassium permanganate. | 05 |
| | (c) Explain working of Gieger Muller counter in detail. | 05 |
| Q.2 | (a) Write a brief note on sources of impurities in pharmaceuticals. | 06 |
| | (b) Give preparation and assay principle of bleaching powder. | 05 |
| | (c) Define the following: 1) Hypochlorhydria, 2) Respiratory stimulant, 3) Laxative, 4) Pharmacopoeia, 5) Preservative. | 05 |
| Q.3 | (a) What are antimicrobial agents? Give its mechanism of action. | 06 |
| | (b) Give preparation and uses of aluminum hydroxide gel and potassium iodide. | 05 |
| | (c) Write pharmaceutical applications of radiopharmaceuticals. | 05 |
| Q.4 | (a) Comment on the following :
1) Nitrobenzene is used in assay of ammonium chloride.
2) Citric acid is used in limit test of Iron.
3) Polyhydroxy alcohol is used in assay of boric acid. | 06 |
| | (b) Write a note on cyanide poisoning and its treatment. | 05 |
| | (c) Give synonym of the following: 1) Muriatic acid, 2) Lunar caustic, 3) Milk of magnesia, 4) Lime water, 5) Rochelle salt | 05 |
| Q.5 | (a) Write a detail note on purification methods of water. | 06 |
| | (b) Explain antioxidant and its mechanism. Give criteria for substance to act as an ideal antioxidant. | 05 |
| | (c) Explain various physiological buffer systems. | 05 |
| Q. 6 | (a) Define and classify antacid. Write ideal properties of antacid. | 06 |
| | (b) Give preparation and uses of sodium thiosulphate | 05 |
| | (c) What are anticaries agents? Explain any one inorganic compound used as anticaries agents. | 05 |
| Q.7 | (a) Enlist official compounds of calcium. Give preparation properties and uses of calcium gluconate. | 06 |
| | (b) What are intra and extra cellular electrolytes? Give composition of oral dehydration salt. | 05 |
| | (c) Write a note on various preparation of iodine solution. | 05 |
