

GUJARAT TECHNOLOGICAL UNIVERSITY**B. Pharm. - SEMESTER-I • EXAMINATION – SUMMER-2016****Subject Code: 210003****Date: 25/5/2016****Subject Name: Pharmaceutical Chemistry - I****Time: 02:30 pm – 05:30 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) Explain the following statement | 06 |
| | (i) Alkalinity of aqueous solution of borax increase with dilution. | |
| | (ii) pH of distilled water falls when allowed to stand in air | |
| | (iii) Zinc oxide is amphoteric in nature. | |
| | (b) Give the structural formula and use of the following: | 05 |
| | (i) Lunar caustic (ii) Chlorinated lime (iii) Magnesium sulphate | |
| | (iv) Blue vitriol (v) Hydrogen peroxide | |
| | (c) Write short note on “Antidote” | 05 |
| Q.2 | (a) Write an informative note on pharmacopoeia and pharmacopoeial monograph | 06 |
| | (b) Draw the diagram of Gutzeit apparatus and enumerate the principle for the limit test of arsenic | 05 |
| | (c) Write a short note on purified water for injection | 05 |
| Q.3 | (a) Define and classify antacid. Give method of preparation, properties and use of any one aluminium containing antacids. | 06 |
| | (b) Write short note on radiopharmaceuticals. Explain its applications | 05 |
| | (c) Write a note on dental products | 05 |
| Q.4 | (a) Define and classify topical agents. Write a brief note on zinc oxide. | 06 |
| | (b) Write detail note on “Electrolyte replenishers” | 05 |
| | (c) Define and explain “pH and Buffer solutions” and give its importance in pharmacy | 05 |
| Q.5 | (a) Explain the various theories for acids and bases | 06 |
| | (b) Define and explain “Antioxidants”. Give preparation, properties and uses of sodium metabisulphite. | 05 |
| | (c) Write short note on saline cathartics | 05 |
| Q.6 | (a) Define “Anti microbial agents”. Discuss its mechanism of action. Write brief note on Lugol’s solution. | 06 |
| | (b) Enumerate the official compounds of Iron. Give the physiological importance of iron. | 05 |
| | (c) Write a note on respiratory stimulants. | 05 |
| Q.7 | (a) Define and classify gastrointestinal agents with suitable examples. | 06 |
| | (b) Write a short note on “Limit test for Lead” | 05 |
| | (c) Define and explain Pharmaceutical Aids. Give its importance in Pharmacy. | 05 |