

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.PHARM - SEMESTER- 1 EXAMINATION – SUMMER -2019**

**Subject Code: 2210002****Date: 30-05-2019****Subject Name: Pharm Chem-I (Inorganic Chemistry)****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.

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|-------------|--|-----------|
| <b>Q.1</b>  | (a) What are impurities? Give sources of impurities.   | <b>06</b> |
|             | (b) Write a note on limit test of Arsenic.   | <b>05</b> |
|             | (c) Write principle of limit test of chloride and sulphate.  | <b>05</b> |
| <b>Q.2</b>  | (a) What are antacids? Write preparation, properties and assay principle of Aluminum hydroxide gel.  | <b>06</b> |
|             | (b) Write short note on saline cathartics.   | <b>05</b> |
|             | (c) Write in brief mechanism of action of antimicrobial agents.  | <b>05</b> |
| <b>Q.3</b>  | (a) Explain in brief physiological acid-base balance.  | <b>06</b> |
|             | (b) Write a note on ORS.   | <b>05</b> |
|             | (c) Enlist major intra and extra cellular electrolytes. Discuss the important biological function of sodium ion and bicarbonate ion in the body. | <b>05</b> |
| <b>Q.4</b>  | (a) Give biological effect of Radiation. Write G-M counter in detail.  | <b>06</b> |
|             | (b) Write a note on hazards of radiopharmaceuticals.   | <b>05</b> |
|             | (c) Write short note on Antidotes.   | <b>05</b> |
| <b>Q.5</b>  | (a) Give Assay principle of following compounds<br>(i) Boric acid (ii) Hydrogen peroxide (iii) Calcium gluconate                                 | <b>06</b> |
|             | (b) Write a note on Dental products.   | <b>05</b> |
|             | (c) What are inhalants? Write storage condition of Oxygen and Carbon dioxide.  | <b>05</b> |
| <b>Q. 6</b> | (a) Explain Lowry-Bronsted theory of acid and base. Write a note on buffers.   | <b>06</b> |
|             | (b) Write a note on chelating agents.  | <b>05</b> |
|             | (c) Explain with examples (i) Antioxidants (ii) Adsorbents.  | <b>05</b> |
| <b>Q.7</b>  | (a) Explain with examples:<br>(i) Sclerosing agents (ii) Expectorants (iii) Emetics  | <b>06</b> |
|             | (b) Write synonym with structural formula of following<br>(i) Chlorinated lime (ii) Precipitated Chalk (iii) Baking soda                         | <b>05</b> |
|             | (c) Write short note on official compounds of Iron.  | <b>05</b> |

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