

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM. - SEMESTER-I • EXAMINATION –SUMMER 2017

Subject Code: 210003**Date: 01/06/2017****Subject Name: Pharmaceutical Chemistry-I****Time: 02:30 PM to 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.

- Q.1** (a) Explain the following terms: **06**
 1. Hyperkalemia 2. Preservatives 3. Sedative
 4. Buffers 5. Astringents 6. Protectives
- (b) Define limit test. Write a detailed note on limit test for iron. **05**
- (c) Define impurities. Describe the sources of impurities. **05**
- Q.2** (a) Give the synonyms and uses of following **06**
 1. Common salt 2. Chlorinated lime 3. Baking soda
 4. Rochelle salt 5. Slaked lime 6. Green vitriol
- (b) Write a note on Antioxidants **05**
- (c) Clarify: Water for injection, sterile water for injection and purified water I.P. **05**
- Q.3** (a) Distinguish between **06**
 1. Poison and Antidote
 2. Hypochlorhydria and Hyperchlorhydria
 3. Hyponatremia and Hypernatremia
- (b) Discuss the factors affecting selection of Pharmaceutical buffers and name any two physiological buffers and two analytical buffers. **05**
- (c) Write down application of Radiopharmaceuticals. **05**
- Q.4** (a) Comment on the following : **06**
 1) Nitrobenzene is used in assay of ammonium chloride.
 2) Magnesium sulphate is used in the assay of calcium lactate.
 3) Polyhydroxy alcohol is used in assay of boric acid.
- (b) Define Pharmacopeia. Give a brief note on Indian Pharmacopeia **05**
- (c) Write a note on chelating agents used in therapy. **05**
- Q.5** (a) Give an account on method of preparation and uses of hydrochloric acid. **06**
- (b) What are antacids? Outline the ideal requirements of an antacid. **05**
- (c) Write a short note on dental products. **05**
- Q.6** (a) Give method of preparation and category of following compounds. **06**
 1. Potassium chloride
 2. Silver nitrate
 3. Sodium carbonate
- (b) Write a note on oral rehydration salt. **05**
- (c) Discuss the biological importance of calcium. **05**
- Q.7** (a) Define haematinic. Write about various haematinic preparations. **06**
- (b) Discuss at length on dried aluminium hydroxide gel. **05**
- (c) How the radioactivity measured? Write a note on GM counter. **05**