

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**