

**UKA TARSADIA UNIVERSITY**  
B.Pharm 1st Semester Examination 2011-2012  
030020102- Pharmaceutical Chemistry – I

Time: 3 Hours

Max. Marks: 70

**Instructions:**

1. Attempt all questions.
2. Write each section in a separate answer book.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks.
5. Draw diagrams/figures whenever necessary.

**Section-I**

**Q-1 (A) Comments on followings:** **[07]**

- I) NaOH is required to be stored in tightly closed non reactive glass container.
- II) Thioglycolic acid is used in Limit test of Iron.
- III) Glycerin is used in the assay of Boric acid.
- IV) Calamine is pink in colour.
- V) Mixtures of aluminum and magnesium compound are used in antacid.
- VI)  $\text{AgNO}_3$  is added in Limit test of Chloride.
- VII) Pharmacopoeia does not prescribe limits for limit test of chloride, sulphate and iron.

**Q-1 (B) Answer the following in brief: (Any 4)** **[08]**

- I) What are GIT agents? Give their classification with examples.
- II) Explain the terms laxative and purgatives.
- III) Give the important uses of nitrous oxide.
- IV) What are the important roles played by copper ion in the body?
- V) Write method of preparation and uses of sodium bicarbonate.
- VI) Explain the storage conditions of oxygen.

**Q-2 Answer the following:** **[10]**

- A) Explain the various sources of impurities present in inorganic pharmaceutical substance.

**OR**

- A) Define and classify antacids with examples. Write the method of preparation and uses of any one of them and write note on antacid combination therapy.
- B) What is hardness of water? Explain the methods of removing hardness of water.

**OR**

- B) Write a detail note on adsorbents and protective.

**Q-3 Answer the following in detail. (Any 2)** **[10]**

- A) Write a note on aluminum hydroxide gel.
- B) Write the principle, reaction and apparatus used in limit test of Arsenic.
- C) Define buffer solution and give a note on Physiological Buffers.

## **Section-2**

**Q-4 (A) Write uses of following inorganic substances: [07]**

- I) Dibasic calcium phosphate
- II) Ammonium carbonate
- III) Potassium iodide
- IV) Sodium nitrite
- V) Disodium EDTA
- VI) Activated charcoal
- VII) Potassium permanganate

**Q-4 (B) Explain following terms with examples: (Any 4) [08]**

- I) Anticaries agent
- II) Antimicrobial agent
- III) Expectorant
- IV) Antidote
- V) Preservative
- VI) Hematinics

**Q-5 Answer the following: [10]**

- A) Explain the treatment of cyanide poisoning in detail.

**OR**

- A) Explain the importance of inorganic adsorbents, diluents and filter aids in pharmaceutical industry.

- B) Define the term radio-opaque contrast media. Describe preparation, properties and uses of barium sulphate.

**OR**

- B) Explain the units for measurement of radioactivity.

**Q-6 Answer the following in detail. (Any 2) [10]**

- A) Enumerate the official compounds of iron and explain the preparation, properties and uses of any one of them.
- B) Define and classify topical agents. Write method of preparation, properties and uses of iodine solution.
- C) Enumerate the methods of measurement of radioactivity and explain any one in detail.