Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. – SEMESTER – I • EXAMINATION – WINTER 2013

Subject Code: 210003 Date: 01-01-2014 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. 0.1 Define limit test. Give the principle, chemical reaction involved in the limit (a) 06 test for Sulphate. Discuss the sources of impurities in pharmaceuticals. 05 (b) Define buffer. Give the mechanism of action of buffer. (c) 05 **Q.2** Define topical agents. Classify them with suitable examples. Give the (a) 06 preparation of any two topical agents. What are antacids? Give an ideal properties of antacids (b) **05** Give the preparation, properties, uses and storage conditions of Ferrous (c) 05 sulphate, Baking soda and Ammonium Chloride. 0.3 Write a short note on: (i) Expectorants (ii) G.M.Counter. **06** (a) Give the assay of Hydrogen peroxide and Boric acid. (b) 05 Explain the role of Sodium and calcium in body. (c) 05 What are radio pharmaceuticals. Enumerate the various units of 0.4 (a) 06 radioactivty. What precautions are to be taken in handling and storage of radioactive materials. (b) Why antioxidants are used in pharmacy? Give the mechanism of its action. 05 Write biochemical importance of Oxygen and Carbon dioxide in body. (c) 05 0.5 Write a short note on: (i) Saline cathartics (ii) ORS (iii) Hematinics 06 (a) Define antidotes. Classify them with examples. Outline the role of activated (b) 05 charcoal in poisoning. What is dental carries. Explain the role of various compounds used in dental 05 (c) diseases. **O.** 6 Discuss the limit test of arsenic in detail. **06** (a) Discuss the Lowry-bronsted and Lewis concepts of acids and base briefly. (b) 05 Expalin the following terms: (i) Filter aids (ii) Sclerosing agents (iii) Trace (c) 05 elements (iv) Anesthetics (v) Chelating agents. **Q.7** Give the name of any compound used as: (i) Astringent (ii) Adsorbent (iii) (a) 06 Complexing agent (iv)Respiratory stimulant (v) Desensitizing agent (vi) antiseptic Discuss the various official preparions of iodine and iron. (b) 05

(c)

Sedatives

Write a short note on: (i) Emetics (ii) Physiological acid-base balance (iii)

05