Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. – SEMESTER – I • EXAMINATION – WINTER • 2014

Subject Code: 210003 **Date: 30-12-2014**

Subject Name: Pharmaceutical Chemistry – I

Time: 10:30 am - 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.**

Q.1 (a) Explain the following terms **06**

1. Bacteriostatic
2. Pharmacopoeia
3. Indicator
4. Buffer capacity
5. Suspending agent
6. Alkalosis

(b) Define and classify topical agents with suitable examples. Give preparation, assay and uses of ZnO. **05**

(c) Explain the term 'limit test' and write down the limit test for chloride and sulphate. **05**

Q.2 (a) Enumerate the various acid and base theories. Explain any two with its limitation in detail. **06**

(b) Give an informative note on dental products. **05**

(c) Define antidotes. Enumerate various types of antidotes with suitable examples. Give preparation and uses of any two. **05**

Q.3 (a) What do you understand by antibacterial agents? Explain its mechanism. Give the properties, assay principle and uses of $AgNO_3$. **06**

(b) Write a short note on Limit test for Arsenic. **05**

(c) Write a brief note on Radiopharmaceuticals. **05**

Q.4 (a) Write a note on electrolyte replenishers and antioxidants. **06**

(b) Define the following terms with suitable example **05**

1. Cathartics
2. Preservatives
3. Sedative
4. Deliquesant
5. Expectorants

(c) Give the synonyms and uses of **05**

1. Boric acid
2. Slaked lime
3. Baking soda
4. Chlorinated lime
5. Rochelle Salt

Q.5 (a) Write the assay principle and uses of followings **06**

a. Phosphoric acid
b. Ammonium chloride
c. Hydrochloric acid

(b) Classify followings with suitable examples **05**

a. Antioxidants
b. Antimicrobial agents

(c) Write about the source of impurities. **05**

Q.6	(a) Classify GIT agents with examples.	**06**
	(b) Discuss in detail Oral Rehydration Salt.	**05**
	(c) Define buffer. Write about the buffer action.	**05**
Q.7	(a) Write down the preparation, assay principle, uses and storage condition of Potassium Permanganate and H_2O_2.	**06**
	(b) Give a note on biological significance of calcium.	**05**
	(c)Give a brief note on chelating agents used in therapy.	**05**

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