

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**D.Pharm 1<sup>st</sup> Year- • EXAMINATION – SUMMER-2018**

**Subject Code: 410002**

**Date: 21/05/2018**

**Subject Name: Pharmaceutical chemistry-I**

**Time: 10:30 AM TO 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) Define impurity. Enlist various sources of impurities and discuss each in detail. (6)
- (b) Give the difference of followings. (5)
1. Assay and Limit test
  2. Iodometric titration and iodimetric titration
- (c) Write a note on limit test for arsenic. (5)
- Q-2 (a) Give difference between Mohr's method and modified volhard's method for assay of Sodium chloride. (6)
- (b) Write short note on respiratory stimulants. (5)
- (c) What is anticaries agent? Enlist anticaries agents and give detail note on sodium fluoride. (5)
- Q-3 (a) Which mechanism cyanide poison get work and write a note on antidotes of cyanide poisoning. (6)
- (b) Define the following terms with example. (5)
1. Buffer, 2. Astringent, 3. Expectorant, 4. Protective, 5. Germicide.
- (c) Define antioxidants. Discuss mechanism of action of antioxidants. (5)
- Q-4(a) Write a note of physiological acid-base balance. (6)
- (b) What are strong acid and base? Write detail note of Lewis acid base theory. (5)
- (c) Write properties, uses and storage condition of Potassium iodide. (5)
- Q-5 (a) Classify Topical agents and give name of different topical protective agents. Give Properties of Titanium dioxide. (6)
- (b) Write name and composition of different Iodine solution. (5)
- (c) Give methods of preparation, properties and uses of HCl. (5)

Q-6(a) List out major intra and extra cellular electrolytes. Discuss in detail physiological (6)

Importance of sodium ion.

(b) Write a note on ORS. (5)

(c) Give storage condition of following Gases. (5)

1. CO<sub>2</sub>, 2. NO<sub>2</sub>, 3. O<sub>2</sub>.

Q-7(a) What are radiopharmaceuticals? Write application of radiopharmaceuticals. (6)

(b) Give the formula and uses of following inorganic compound. (5)

1. Alum

2. Precipitated chalk

3. Sodabycarb

4. Green vitriol

5. Bleaching powder

(c) Define and classify antacid and write ideal properties of antacid. (5)

\*\*\*\*\*