

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA PHARMACY YEAR- 1 • EXAMINATION – WINTER - 2023

Subject Code: 410002

Date:12-12-2023

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)** Give answer of following questions. **06**
1. Write the reaction involved in the limit test of chloride.
 2. Why glycerin is added in the estimation of Boric acid?
 3. Enlist intra and extra cellular electrolytes.
- (b)** Explain Lowry-Bronsted theory of acid and base in detail. **05**
- (c)** Write descriptive note on ORS. **05**
- Q.2 (a)** What is antacid? Give ideal properties of antacid. Give synonym, preparation, assay, properties and uses of Sodium Bicarbonate. **06**
- (b)** Define following terminology. **05**
- I) Antiseptic II) Disinfectant III) Germicide IV) Bacteriostatic
V) Buffer
- (c)** Draw gutzet apparatus and write their construction and write principle and procedure of limit test for arsenic. **05**
- Q.3 (a)** Differentiate followings. **06**
1. Strong acid and weak acid
 2. Mohr's method and modified Mohr's method
- (b)** By which mechanisms antimicrobial drugs are get work. **05**
- (c)** Write assay, preparation, properties, uses and therapeutic category of hydrogen peroxide. **05**
- Q.4 (a)** Write a note on sources of impurities. **06**
- (b)** Give biological effect of Radiation. Write application of radio pharmaceuticals. **05**
- (c)** Write detail not on any two drugs used as acidifiers in your syllabus. **05**
- Q.5 (a)** Define and classify dental product with example and give properties, uses of drug used as dentifrices. **06**
- (b)** Write descriptive note on any two methods of measurement of radioactivity. **05**
- (c)** Write a short note on Antioxidants. **05**
- Q. 6 (a)** Define Antidotes. Discuss the mechanism of its action. **06**
- (b)** Write short note on saline cathartics. **05**
- (c)** Discuss the storage and labeling condition required for oxygen, carbondioxide and nitrous oxide. **05**
- Q.7 (a)** Draw the formula and give uses of following compounds. **06**
- (i) Green vitriol (ii) Chlorinated lime (iii) Alum
- (b)** Define buffers. Give mechanism of buffer action and importance of buffer solution in pharmacy. **05**
- (c)** Define Topical agents. Classify them with examples. Give brief about the various preparations of Iodine. **05**