

**PARUL UNIVERSITY**  
**FACULTY OF PHARMACY**  
**B.Pharm. Winter 2018-19 Examination**

**Semester: 1****Subject Code: 08101101****Subject Name: Pharmaceutical Chemistry-I****Date: 10/12/2018****Time: 2:00 pm to 5:00 pm****Total Marks: 75****Instructions**

1. Figures to the right indicate maximum marks.
2. Make suitable assumptions wherever necessary.

**Q.1 Essay Type Questions. (any 2 out of 3) (10 Marks Each) (20)**

1. Define the term impurity. Discuss importance of limit test in pharmacy. Explain the principle involved in the limit test of arsenic by giving reactions and role of reagents used with well labeled diagram of Arsenic apparatus.
2. What are antimicrobial agents? Classify them with suitable examples. Discuss the various mechanism of actions of antimicrobial agent with monograph of Iodine solution
3. What are antacids? Write mechanism of action of antacids with monograph of milk of magnesia.

**Q.2 Short Essay Type Questions. (any 7 out of 9) (5 Marks Each) (35)**

1. Explain Bronsted-Lowery acid-base theory. What is conjugate acid and base?
2. Define physiological buffer. Describe the mechanism of maintaining pH of blood.
3. Discuss biological importance of calcium ions and their deficiency symptoms.
4. Discuss in detail about anticaries agents.
5. What are Protectives? Write monograph of any one inorganic compound having Protective action.
6. Write note on Electrolytes used in Replacement therapy.
7. What is hard water? How can we convert hard water into the soft water?
8. Write a brief note on ORS.
9. Write monograph of Zinc oxide.

**Q.3 Short Answers. (2 Marks Each) (20)**

1. Define Molarity and Mole fraction.
2. What are antidotes?
3. Discuss principle of chloride limit test.
4. Classify Antacids with examples.
5. Why citric acid is used in Iron limit test. Discuss with its possible reaction.
6. Write a brief note on Cu as essential trace ion for body.
7. Write Preparation and assay method for Aluminium hydroxide.
8. What is astringent? Discuss its mechanism.
9. Write any two official test for Water.
10. Write biological role of sodium.