

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – I • EXAMINATION – SUMMER • 2014

Subject Code: 210003

Date: 09-06-2014

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.

- Q.1** (a) What do you mean by impurity? Discuss the sources of impurity in pharmaceuticals? **08**
(b) Define limit test. Write the importance of limit test. Write a detail note on limit test of arsenic. **08**
- Q.2** (a) What are antimicrobial agents? Classify them with suitable examples. Discuss the various mechanism of actions them. **08**
(b) What are radio pharmaceuticals? Discuss their applications. **08**
- Q.3** (a) What are gastrointestinal agents? Briefly classify them with suitable examples. **06**
(b) Define antacid. Describe ideal properties of antacid. **05**
(c) Write a note on physiological acid base balance. **05**
- Q.4** (a) Answer the followings **06**
(i) Why citric acid is added in limit test of iron?
(ii) Why poly hydroxyl organic compound is added in assay of boric acid?
(iii) What are sedatives?
(b) Define followings (iii) Deliquescent **05**
(i) Pharmaceutical aids (iv) Buffer capacity
(ii) Hygroscopic (v) Anesthetics
(c) Write the chemical formula and use (iii) Green vitriol **05**
of followings (iv) Caustic soda
(i) Chlorinated lime (v) Borax
(ii) Rochelle salt
- Q.5** (a) What are dental products? Classify them with suitable examples. Write the preparation of sodium fluoride. **06**
(b) Define antidotes. Describe the treatment of cyanide poisoning. **05**
(c) Explain the term hypernatremia and hypokalemia. Write the composition and use of ORS. **05**
- Q. 6** (a) Write short note on purified water and water for injection. **06**
(b) What are antioxidants and preservatives? Write preparation and properties of any one antioxidant. **05**
(c) What are haemetinics? Enlist official compound of iron. Write the preparation, property and use of ferrous sulphate. **05**
- Q.7** (a) Write a detail note on expectorant and emetics **06**
(b) Give method of preparation with chemical reaction for following compounds. **05**
(i) Aluminium hydroxide gel.
(ii) Calcium gluconate
(c) Write the storage condition of (iii) Silver Nitrate **05**
followings (iv) Iodine
(i) Oxygen (v) Calamine
(ii) Phosphoric acid
