

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.

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|------|-----|--|----|
| 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 | 05 |
| | | (i) Pharmaceutical aids | |
| | | (ii) Hygroscopic | |
| | | (iii) Deliquescent | |
| | | (iv) Buffer capacity | |
| | | (v) Anesthetics | |
| | (c) | Write the chemical formula and use of followings | 05 |
| | | (i) Chlorinated lime | |
| | | (ii) Rochelle salt | |
| | | (iii) Green vitriol | |
| | | (iv) Caustic soda | |
| | | (v) Borax | |
| 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 followings | 05 |
| | | (i) Oxygen | |
| | | (ii) Phosphoric acid | |
| | | (iii) Silver Nitrate | |
| | | (iv) Iodine | |
| | | (v) Calamine | |
