

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. - SEMESTER-I • EXAMINATION – SUMMER-2016

Subject Code: 210003

Date: 25/5/2016

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) Explain the following statement **06**
 - (i) Alkalinity of aqueous solution of borax increase with dilution.
 - (ii) pH of distilled water falls when allowed to stand in air
 - (iii) Zinc oxide is amphoteric in nature.
 - (b) Give the structural formula and use of the following: **05**
 - (i) Lunar caustic (ii) Chlorinated lime (iii) Magnesium sulphate
 - (iv) Blue vitriol (v) Hydrogen peroxide
 - (c) Write short note on “Antidote” **05**
- Q.2**
- (a) Write an informative note on pharmacopoeia and pharmacopoeial monograph **06**
 - (b) Draw the diagram of Gutzeit apparatus and enumerate the principle for the limit test of arsenic **05**
 - (c) Write a short note on purified water for injection **05**
- Q.3**
- (a) Define and classify antacid. Give method of preparation, properties and use of any one aluminium containing antacids. **06**
 - (b) Write short note on radiopharmaceuticals. Explain its applications **05**
 - (c) Write a note on dental products **05**
- Q.4**
- (a) Define and classify topical agents. Write a brief note on zinc oxide. **06**
 - (b) Write detail note on “Electrolyte replenishers” **05**
 - (c) Define and explain “pH and Buffer solutions” and give its importance in pharmacy **05**
- Q.5**
- (a) Explain the various theories for acids and bases **06**
 - (b) Define and explain “Antioxidants”. Give preparation, properties and uses of sodium metabisulphite. **05**
 - (c) Write short note on saline cathartics **05**
- Q. 6**
- (a) Define “Anti microbial agents”. Discuss its mechanism of action. Write brief note on Lugol’s solution. **06**
 - (b) Enumerate the official compounds of Iron. Give the physiological importance of iron. **05**
 - (c) Write a note on respiratory stimulants. **05**
- Q.7**
- (a) Define and classify gastrointestinal agents with suitable examples. **06**
 - (b) Write a short note on “Limit test for Lead” **05**
 - (c) Define and explain Pharmaceutical Aids. Give its importance in Pharmacy. **05**
