

GUJARAT TECHNOLOGICAL UNIVERSITY
D. Pharma I • EXAMINATION – SUMMER-2017

Subject Code: 410002**Date: 29/05/2017****Subject Name: Pharmaceutical Chemistry I****Time: 10:30AM TO 1:30PM****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 are radiopharmaceuticals? Write a note on GM Counter. **06**
(b) Give method of preparation, properties and uses of the following (1) Boric acid **05**
and (2) Calcium hydroxide.
(c) Write a note on biological effects of radiation. **05**
- Q.2** (a) Explain in brief principle for the limit test of (1) Chloride and (2) Iron. **06**
(b) Describe the sources of impurities in pharmaceuticals. **05**
(c) Write a note on respiratory stimulants. **05**
- Q.3** (a) Write a note on dental products. **06**
(b) Give chemical formula, uses and storage condition for (1) Hydrochloric acid **05**
(2) calcium carbonate.
(c) Write a note on ORS. **05**
- Q.4** (a) Explain the following terms (1) Quality control (2) Expectorant (3) Assay (4) **06**
Emetics (5) Antidotes and (6) Astringent.
(b) Write a note on radio opaque contrast media. **05**
(c) What are antioxidants? Classify antioxidants with suitable examples. Write a **05**
note on any one official antioxidants.
- Q.5** (a) What are antacids? Classify antacid with suitable examples. Write on **06**
combination of antacid preparation.
(b) Write a note on protectives and adsorbents. **05**
(c) Write a note on official buffers. **05**
- Q. 6** (a) Enlist major extra & intra cellular electrolytes. Write in brief about electrolytes **06**
used for replacement therapy.
(b) Write a brief note on inhalants. **05**
(c) Discuss the biological role of iodine and iron. **05**
- Q.7** (a) Write a detail note on the following monographs (1) Hydrogen peroxide (2) and **06**
Sodium hydroxide.
(b) Explain, how physiological acid-base balance of the body is maintained? **05**
(c) Explain the following terms (1) Error (2) Hygroscopic (3) Disinfectant (4) **05**
Deliquescent (5) Pharmacopoeia.
