

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.

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| 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 and (2) Calcium hydroxide. | 05 |
| | (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 (2) calcium carbonate. | 05 |
| | (c) | Write a note on ORS. | 05 |
| Q.4 | (a) | Explain the following terms (1) Quality control (2) Expectorant (3) Assay (4) Emetics (5) Antidotes and (6) Astringent. | 06 |
| | (b) | Write a note on radio opaque contrast media. | 05 |
| | (c) | What are antioxidants? Classify antioxidants with suitable examples. Write a note on any one official antioxidants. | 05 |
| Q.5 | (a) | What are antacids? Classify antacid with suitable examples. Write on combination of antacid preparation. | 06 |
| | (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 used for replacement therapy. | 06 |
| | (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 Sodium hydroxide. | 06 |
| | (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) Deliquescent (5) Pharmacopoeia. | 05 |
