

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B. Pharm.- SEMESTER-VII • EXAMINATION –SUMMER-2021**

**Subject Code: 270002****Date: 04/08/2021****Subject Name: Pharmaceutical Technology -I****Time:10:30AM TO 01:30PM****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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|-------------|-----|--|-----------|
| <b>Q.1</b>  | (a) | Draw the detail flow chart highlighting various manufacturing steps in the large scale production of oral pharmaceutical suspension. | <b>06</b> |
|             | (b) | Give the merits and demerits of clear oral liquid dosage form.   | <b>05</b> |
|             | (c) | Differentiate between: Cold cream and Vanishing cream.   | <b>05</b> |
| <b>Q.2</b>  | (a) | Write in detail about emulsifying agent used in formulation of various types of emulsion.  | <b>06</b> |
|             | (b) | Discuss the evaluation tests for the emulsion in detail.   | <b>05</b> |
|             | (c) | Write a note on preservatives.   | <b>05</b> |
| <b>Q.3</b>  | (a) | Discuss the filling techniques of aerosols.  | <b>06</b> |
|             | (b) | Write a note on containers used for pharmaceutical aerosols.   | <b>05</b> |
|             | (c) | Write in detail the pharmaceutical applications of aerosols.   | <b>05</b> |
| <b>Q.4</b>  | (a) | Give the layout of industrial injectable production unit.  | <b>06</b> |
|             | (b) | Discuss the manufacturing procedure of suppositories.  | <b>05</b> |
|             | (c) | Write a note on Metered Dose Inhalers.   | <b>05</b> |
| <b>Q.5</b>  | (a) | Discuss the factors affecting the penetration of drug through the skin.  | <b>06</b> |
|             | (b) | Enlist the ideal requirements of the ointment bases.   | <b>05</b> |
|             | (c) | Write a note on Clear Gels.  | <b>05</b> |
| <b>Q. 6</b> | (a) | Explain the source of contamination and how to prevent them.   | <b>06</b> |
|             | (b) | How are ampoules sealed? Write about faults in sealing, how to detect them and their remedies.                                       | <b>05</b> |
|             | (c) | Write a note on Total Parenteral Nutrition.  | <b>05</b> |
| <b>Q.7</b>  | (a) | Discuss the Evaluation tests for Ophthalmic dosage form.   | <b>06</b> |
|             | (b) | Write a note on Prefilled syringes.  | <b>05</b> |
|             | (c) | Write a note on Freeze Drying.   | <b>05</b> |

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