

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.Pharm - SEMESTER- 7<sup>th</sup> • EXAMINATION – WINTER -2019**

**Subject Code: 2270002****Date:18/11/2019****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) Write in details about containers used for aerosols. How will you evaluate pharmaceutical aerosols?  | <b>06</b> |
|             | (b) Enlist the quality control tests for injectables. Explain rabbit test and LAL test.  | <b>05</b> |
|             | (c) Define: Pharmaceutical Aerosols. Give a brief account of propellant and its selection.   | <b>05</b> |
| <b>Q.2</b>  | (a) What are the sources of contamination & methods of prevention in sterile dosage formulations?  | <b>06</b> |
|             | (b) Draw well labeled diagram for aerosols packs. Explain different parts of valve assembly.   | <b>05</b> |
|             | (c) Explain the mechanism of drug penetration through skin. Discuss factors affecting drug absorption through skin from semisolid dosage forms.              | <b>05</b> |
| <b>Q.3</b>  | (a) Write a brief note on formulation of ophthalmic dosage form. Discuss ocular inserts for ophthalmic use.  | <b>06</b> |
|             | (b) Write a short note on 1. Prefilled syringes 2. TPN   | <b>05</b> |
|             | (c) Classify different types of glass as per USP. Describe Water attack test for glass.  | <b>05</b> |
| <b>Q.4</b>  | (a) Enumerate ideal characteristics of suppository bases. Describe methods of manufacturing suppositories in detail.   | <b>06</b> |
|             | (b) Write brief note on: 1. Baby care products 2. Hygienic preparations  | <b>05</b> |
|             | (c) Write a detailed note on storage and purity of W.F.I.  | <b>05</b> |
| <b>Q.5</b>  | (a) Comment: Sedimentation rate of flocculated suspensions is faster than deflocculated suspensions. Differentiate flocculated and deflocculated suspension. | <b>06</b> |
|             | (b) Write brief notes on 1. Tincture 2. Extracts 3. Infusion   | <b>05</b> |
|             | (c) What are various instabilities of emulsions? Discuss them with their causes and precautions to avoid them  | <b>05</b> |
| <b>Q. 6</b> | (a) Write brief notes on: 1. SOPs 2. Recovery and reprocessing 3. Personnel  | <b>06</b> |
|             | (b) Write detailed note on formulation, preparation and evaluation of :<br>1. Sunscreen 2. Nail polish   | <b>05</b> |
|             | (c) What are different types of validation? Write short note on validation of granulation stage in tablet manufacturing.                                     | <b>05</b> |
| <b>Q.7</b>  | (a) Write brief note on formulation, preparation & evaluation of shampoo and conditioners.   | <b>06</b> |
|             | (b) Define Validation. Write a note on validation of steam sterilization.  | <b>05</b> |
|             | (c) Write a note on semi solid bases. Enumerate their selection & ideal requirement  | <b>05</b> |

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