

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 7 EXAMINATION – SUMMER -2020

Subject Code: 2270002**Date: 27-10-2020****Subject Name: Pharmaceutical Technology I****Time: 2:30 PM TO 5:30 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) Enumerate ideal properties of parenteral dosage form. Enumerate the additives used in parenteral dosage forms. Describe any two. **06**
- (b) Write a note on HEPA filters. How is the efficiency of HEPA filters measured? **05**
- (c) Draw a layout of parenteral manufacturing area. Describe the design of rooms & facilities for parenteral manufacturing. **05**
- Q.2** (a) Define Aerosols. Enumerate components of an aerosol system. Write a note on Propellants. **06**
- (b) Comment on the following giving suitable reasons: **05**
- (1) Chlorofluorocarbons are banned for topical aerosols
- (2) Liquefied gas based aerosols maintain constant pressure throughout their shelf life
- (c) Enumerate evaluation parameters for aerosols. Describe any two. **05**
- Q.3** (a) Discuss the stages of Blow Fill Seal technology of parenteral manufacturing. What are its advantages? **06**
- (b) Describe the formulation of Eye drops. **05**
- (c) Describe solid inserts for ophthalmic use. **05**
- Q.4** (a) Classify liquid dosage forms. Write a note on formulation components for clear liquids along with their role in the formulation **06**
- (b) Describe the evaluation criteria for Pharmaceutical suspensions. **05**
- (c) Describe important characteristics of suppository bases **05**
- Q.5** (a) Describe Sun screen products and their evaluation **06**
- (b) Write a note on dentifrices. **05**
- (c) Describe the formulation of lipsticks **05**
- Q.6** (a) Describe the requirements of manufacturing premises as per cGMP. **06**
- (b) Write a note on Batch manufacturing records as per cGMP. **05**
- (c) Define: Microemulsions, SOP, Cryoprotectants, Tinctures, Extracts. **05**
- Q.7** (a) Discuss the mechanism of drug penetration through the skin. Explain factors affecting drug absorption through the skin. **06**
- (b) Enumerate evaluation parameters for suppositories and discuss any two. **05**
- (c) Discuss Briefly: **05**
1. Total Parenteral Nutrition
2. Parenteral suspensions
