

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.Pharm - SEMESTER-VI EXAMINATION – WINTER -20****Subject Code:BP605TP****Date: 13/01/2021****Subject Name: Industrial Pharmacy-I****Time: 2:00 PM TO 4:00 PM****Total Marks: 54****Instructions:**

1. Attempt any **THREE** questions from Q-1 to Q-6.
2. Q.7 is compulsory to attempt.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks.

- Q.1** (a) Define preformulation. Write a note on physicochemical properties related to solubility study in preformulation.. **06**  
(b) Write a note on Polymorphism giving examples. **05**  
(c) Discuss in brief the evaluation test for suspensions. **05**
- Q.2** (a) Explain the criteria for the quality of air in an aseptic area. How is the quality of air controlled in an aseptic area? **06**  
(b) What are pyrogens? Explain the sources of pyrogens in parenterals. Explain the principle of LAL test for pyrogen testing. **05**  
(c) Explain preparation and storage of W.F.I. **05**
- Q.3** (a) Describe the in situ gelling system in ophthalmic drug delivery system. **06**  
(b) Define emulsions. Give types of emulsions. Write pharmaceutical applications of emulsions. **05**  
(c) Discuss in brief the additives used in liquid dosage forms **05**
- Q.4** (a) Discuss the compression related problem in tablet and give suitable suggestion to overcome it. **06**  
(b) What is roller compactor? Draw label diagram, discuss its working and process variable affecting on its performance **05**  
(c) Give the reasons for enteric coating of tablet. Enlist enteric and non enteric film former materials. Write note on plasticizer. **05**
- Q.5** (a) Describe the Rotary die process for manufacturing of soft gelatin capsule. **06**  
(b) Explain size of capsules and write a note on problem and remedies in capsules. **05**  
(c) Discuss the powder glass test and water attack test for packaging in Pharmaceuticals. **05**
- Q.6** (a) What is Pelletization? Discuss factors affecting pellet properties. **06**  
(b) Write a note on Melt Extrusion technology **05**  
(c) Define: Pharmaceutical aerosols. Explain the role of propellants in an aerosol system. Classify propellants and describe liquefied gas propellants in brief. **05**
- Q.7** (a) Classify filling methods for aerosols. Describe the manufacturing of aerosols by cold filling and pressure filling method. **06**
- OR**
- (a) Differentiate between vanishing and cold cream with formulation significant **06**
- OR**
- (a) What is SPF in sunscreen .How to calculate it **06**