

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.

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|-------------|-----|--|-----------|
| 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 |
