

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – VII • EXAMINATION – SUMMER 2013

Subject Code: 270002

Date: 14-05-2013

Subject Name: Pharmaceutical Technology- I

Time: 02.30 am - 05.30 pm

Total Marks: 80

Instructions:

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

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|------------|-----|--|-----------|
| Q.1 | (a) | Write a brief note on 1. Emulsifying agents 2. Suspending agents | 06 |
| | (b) | Enlist the ideal characteristics of suspension. Comment on “Flocculated suspension is an ideal suspension.” | 05 |
| | (c) | Write a short note on vehicles & solvents used in liquid dosage forms. | 05 |
| Q.2 | (a) | Discuss various methods for solubility enhancement in liquid dosage forms. | 06 |
| | (b) | Write a detail note on hydrocolloids used in suspension with examples. | 05 |
| | (c) | Write a brief note on 1. Micro-emulsion 2. Multiple emulsion | 05 |
| Q.3 | (a) | Discuss evaluation tests for pharmaceutical aerosol products. | 06 |
| | (b) | Discuss in brief the evaluation tests for medicated ointment. | 05 |
| | (c) | Write ideal requirements of ointment bases with examples. | 05 |
| Q.4 | (a) | Give the properties of ideal propellants used in aerosols. | 06 |
| | (b) | Discuss the causes and remedies for following problems in suppository manufacturing. i) Water and miscible liquids in suppositories ii) Volume contraction | 05 |
| | (c) | Draw well labeled diagram for aerosols packs. Explain different parts of it. | 05 |
| Q.5 | (a) | What are clean rooms? Discuss the standards for clean rooms. Enumerate criteria for environmental monitoring of clean rooms. | 06 |
| | (b) | Describe storage conditions & quality control tests for water for injection. | 05 |
| | (c) | Write a note on containers and closures used for parenteral products. | 05 |
| Q.6 | (a) | Write the formulation of a parenteral product. Explain role of each ingredients. Enlist quality control tests for it. | 06 |
| | (b) | Write a note on Blow fill seal technology for parenteral products. | 05 |
| | (c) | Describe pre-filling treatment of parenteral containers. | 05 |
| Q.7 | (a) | Explain in brief 1. Parenteral suspensions 2. Freeze dried products 3. Tinctures 4. Infusion | 06 |
| | (b) | Write a detail note on parenteral nutrition formulations. | 05 |
| | (c) | Explain in brief the formulation and manufacture of ophthalmic ointments with flow diagram. | 05 |
