

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Ph. – SEMESTER 1 – • EXAMINATION – WINTER -2025

Subject Code: BP103TP**Date: 25/02/2026****Subject Name: Pharmaceutics I****Time: 10:30 AM TO 01:30 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) What are the contents of Pharmacopoeia? Give details of USP. | 06 |
| | (b) Calculate dose for a child of 15 months age using Young's and Dilling's formula. (Adult dose of a drug is 170 mg). | 05 |
| | (c) Define i) Enemas ii) Elixirs iii) Liniments iv) Linctus v) dusting powder | 05 |
| Q.2 | (a) Enlist factors affecting posology. Discuss Tolerance and Idiosyncrasy in detail. | 06 |
| | (b) Explain fusion method and chemical reaction method for ointment preparation. | 05 |
| | (c) What are the factors influencing dermal penetration of drugs? Discuss in detail. | 05 |
| Q.3 | (a) Differentiate Simple and compound powders with examples. | 06 |
| | (b) Discuss formulation, labeling and packaging for effervescent granules. | 05 |
| | (c) Enumerate advantages of liquid dosage forms. Discuss excipients used to improve stability of the liquid dosage forms. | 05 |
| Q.4 | (a) Compare and contrast i) Mouthwash and gargles ii) Liniments and lotions | 06 |
| | (b) Define suspension. Explain caking and flocculation in a suspension. | 05 |
| | (c) What are the types of emulsion? Give identification test of emulsion with proper diagram. | 05 |
| Q.5 | (a) Classify suppositories according to its shape. Give its advantages and disadvantages. | 06 |
| | (b) Write a note on evaluation of suppositories. | 05 |
| | (c) Write a note on therapeutic incompatibilities with examples. | 05 |
| Q. 6 | (a) i) Find out the parts of 80% and 30% alcohol to supply 500 ml of 50% alcohol
ii) How much 2% ointment must be added to 30 gm of 15% ointment to make 5% ointment? | 06 |
| | (b) Explain Parts of prescription with detailed pictorial diagram of prescription. | 05 |
| | (c) Read the following prescription of mixture, identify type of incompatibility and suggest remedy. | 05 |
| | R _x
Sodium salicylate.....5 gm
Lemon syrup.....20 ml
Purified Water to.....75 ml | |
| Q.7 | (a) Define pastes and jellies. Discuss various types of bases employed for them. | 06 |
| | (b) i) Dispense 15% w/v 20 litres of glucose solution ii) Find out the proof strength of alcoholic product containing 65% v/v alcohol in USA and India. | 05 |
| | (c) Write a note on instability in emulsions. | 05 |
