

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER– 1 EXAMINATION – WINTER -2024

Subject Code: BP103TP**Date: 15/02/2025****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.

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|-------------|---|-----------|
| Q.1 | (a) Define terms 1) Elixir 2) Lotion 3) Paste 4) Mixture 5) Linctus 6) Enemas | 06 |
| | (b) Write in detail Education and scope of pharmacy. | 05 |
| | (c) Define Prescription. Discuss parts of prescription with sample prescription. | 05 |
| Q.2 | (a) Define Posology. How age, body weight and surface area influence calculation of dose. Write equations to calculate child dose based on Age, Surface area and body Weight. | 06 |
| | (b) Write in detail steps involved in prescription handling. | 05 |
| | (c) Discuss excipients used in different liquid dosage forms. | 05 |
| Q.3 | (a) Define suppositories. Classify suppository bases. Write ideal properties of Suppository bases. | 06 |
| | (b) Write advantages and limitations of Cocoa butter as suppository base. | 05 |
| | (c) Calculate amount of cocoa butter required to prepare 10 suppositories of 1gm each containing 200mg of zinc oxide. (Displacement value of zinc oxide is 5). | 05 |
| Q.4 | (a) Define Emulsion. Classify Emulsion. Discuss instability problems of emulsion and suggest remedy. | 06 |
| | (b) Write labelling requirement for emulsion, liniment and eye drops | 05 |
| | (c) Write methods used in Identification of type of Emulsion. | 05 |
| Q.5 | (a) Define incompatibility. Classify types of incompatibility and discuss therapeutic incompatibility. | 06 |
| | (b) Find concentration of sodium chloride required to make 50 ml of isotonic solution containing 0.5% Ephedrine hydrochloride and 0.5 % Chlorobutol. [freezing point of 1% w/v solution of Ephedrine hydrochloride and Chlorobutol are given as -0.165°C and -0.138°C respectively. freezing point of 1% w/v solution of sodium chloride is -0.576°C] | 05 |
| | (c) Calculate the volume of each 90%, 60 %, 30% alcohol and water required to produce 1000ml of 50% alcohol solution. | 05 |
| Q. 6 | (a) Differentiate followings
1) Paste and ointment
2) Flocculated and deflocculated suspension | 06 |
| | (b) What do you mean by Tolerated and Adjusted type of incompatibility?
Discuss the following prescription and suggest remedy.
Rx
Sodium benzoate
Caffeine citrate
Water. | 05 |
| | (c) Discuss in detail physical incompatibility and suggest remedy with suitable examples. | 05 |
| Q.7 | (a) Classify the ointment bases. Write Ideal properties of ointment base. Discuss properties of absorption bases in brief. | 06 |
| | (b) Discuss various methods of preparation of cream and ointment. | 05 |
| | (c) Discuss formulation, labeling and packaging for effervescent granules. | 05 |