

Exam Code: 0431
Sub. Code: 25923

2125

M.Sc. Applied Chemistry (Pharmaceutical)
First Semester

Paper – 104: Introduction to Pharmaceutical Sciences

Time allowed: 3 Hours

Max. Marks: 60

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting one question from each Unit.

x-x-x

1. Answer the following:-
 - a) Define oleoresins.
 - b) Name two official compendia's of pharmacy.
 - c) What do you understand by active pharmaceutical ingredient?
 - d) What are elixirs? Give example.
 - e) Calculate the amount of sucrose required to prepare 300 ml of a 10% w/v solution.
 - f) Differentiate between bulk powders and effervescent powders. (6x2)

UNIT - I

2. Describe in detail the various methods of extraction used in pharmacy. Highlight their principles and applications. (12)
3. Define extracts and tinctures. Discuss their preparation techniques with examples. Differentiate between liquid, soft, and dry extracts. (12)

UNIT - II

4. Define dosage forms. Elaborate on the need for dosage forms and give their classification with suitable examples. (12)
5. Define and classify pharmaceutical ingredients. Discuss in detail the role of pharmaceutical excipients in formulation development with examples. (12)

UNIT - III

6. Discuss in detail the principle, advantages, and disadvantages of various methods of size reduction. (12)
7. What do you understand by method of allegation? Using this method, calculate the volume of 90% alcohol required to prepare 600ml of 70% alcohol. (12)

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(2)

UNIT - IV

8. Give a detailed account on the formulation and manufacturing considerations for liquid oral dosage forms. (12)

9. Explain the stability considerations for pharmaceutical syrups and solutions. What agents can be used to prevent their microbial contamination and degradation? Explain their mechanism with suitable examples. (12)

x-x-x