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THE OPEN UNIVERSITY OF SRI LANKA
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF PHARMACY
THE ACADEMIC YEAR 2024/2025 – SEMESTER I

BACHELOR OF PHARMACY HONOURS
FMU3203 – PHARMECUTICS I – LEVEL 3
FINAL EXAMINATION
DURATION: TWO (02) HOURS

DATE: 25TH APRIL 2025 TIME: 2.00 P.M. – 4.00 P.M.

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Part B- Short Answer Questions (20 Marks)

1.

1.1. List three (03) drug factors that affect the design of dosage forms. (03 marks)

I.....

II.....

III.....

1.2. State two (02) types of biphasic liquid dosage forms.

(04 marks)

I.....

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II.....

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1.3 State the three (03) main types of pharmaceutical incompatibilities.

(03 marks)

I.....

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II.....

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III.....

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2.

2.1 What is the difference between unit processes and unit operations? (02 marks)

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2.2 What is the difference between exsiccation and desiccation? (06 marks)

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2.3 Define the term 'filter aids' giving one (01) example. (02 marks)

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Part C – Structured Essay Questions (60 Marks)

1.

1.1. List three (03) factors affecting selection of an extraction process. (06 marks)

1.2. List three (03) differences between maceration and percolation extractions. (06 marks)

1.3. List three (03) factors affecting efficiency of the extraction process. (06 marks)

1.4. Briefly explain how the factors you mentioned in 1.3 above affect an extraction process. (12 marks)

2.

2.1 List four (04) factors affecting posology. (04 marks)

2.2 State the importance of carrying out paediatric dose calculations. (06 marks)

2.3 A three-year old boy with leukemia who weighs 30 pounds and with normal body proportion is to receive doxorubicin labelled 2 mg/mL. The dose of doxorubicin is 34.6 mg for an adult with body surface area of 1.73 m^2.

2.3.1 State the formula used for pediatric dose calculation based on body surface area. (05 marks)

2.3.2 Calculate the volume of doxorubicin to be administered to this paediatric patient using the given nomogram (Annex 1-Figure 1). (07 marks)

2.3.3 Briefly explain two (02) reasons for a drug to be formulated as an intravenous dosage form. (08 marks)

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Annex 1

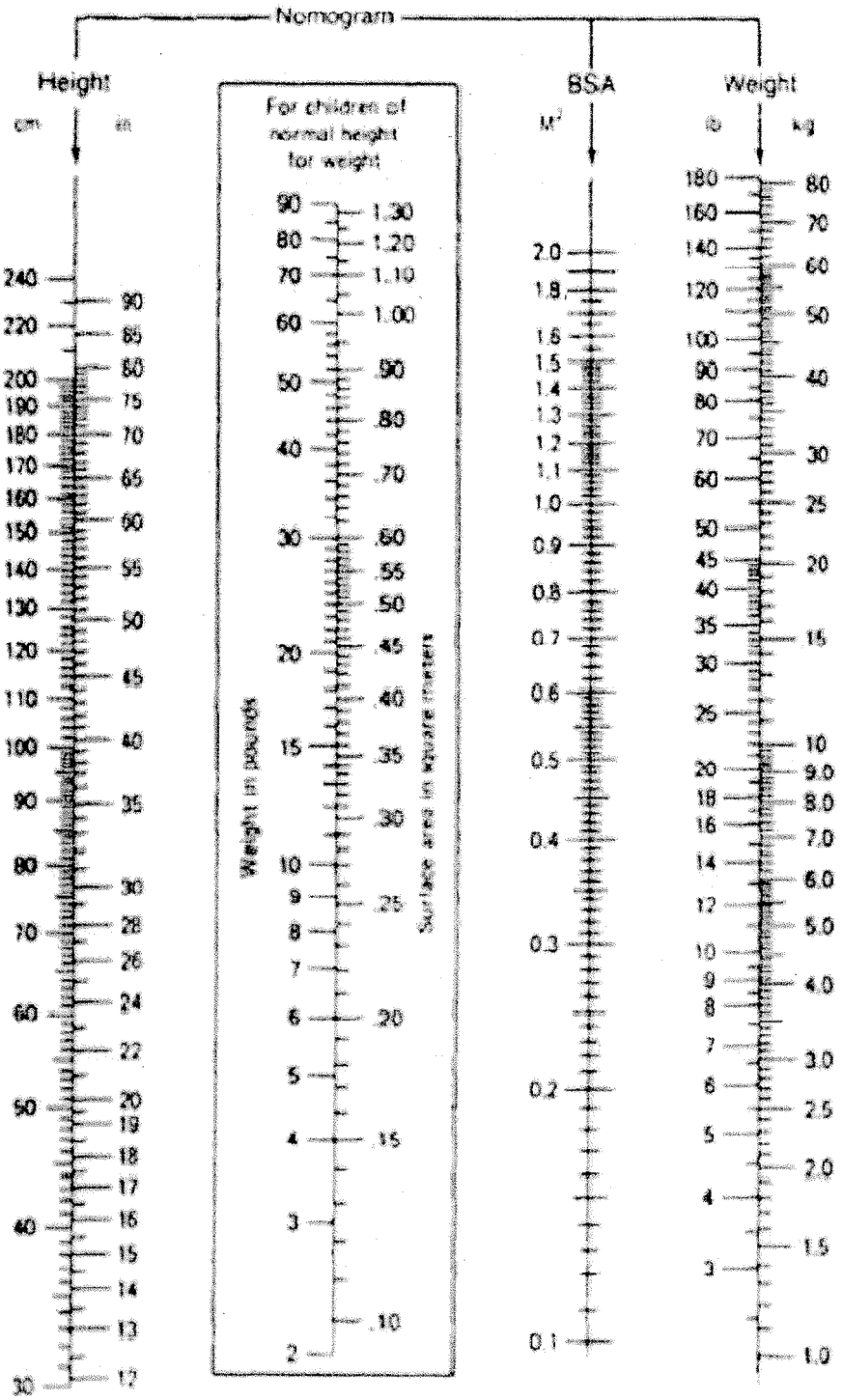


Figure 1: West Nomogram (for Estimation of BSA). The BSA is indicated were a straight line connecting the height and weight intersects the BSA column or, if the patient is roughly of normal proportion, from the weight alone (enclosed area).