



UNIVERSITY OF RUHUNA – FACULTY OF ALLIED HEALTH SCIENCES

DEPARTMENT OF PHARMACY

FIRST BPHARM PART I EXAMINATION – NOVEMBER/DECEMBER 2019

PH 1132 PHARMACEUTICS IA (SEQ)

TIME: TWO HOURS

Department of Pharmacy
Faculty of Allied Health Sciences
University of Ruhuna
20 NOV 2019
Gate

INSTRUCTIONS

- There are **four** questions in A, B and C parts of the SEQ paper.
- Answer **each** part in a separate booklet.
- No paper should be removed from the examination hall.
- Do not use any correction fluid.
- Use illustrations where necessary.

PART A

1.

1.1. Define the term “micrometrics”. (10 marks)

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1.2. List **two** methods which are used to determine the surface area of a particle. (10 marks)

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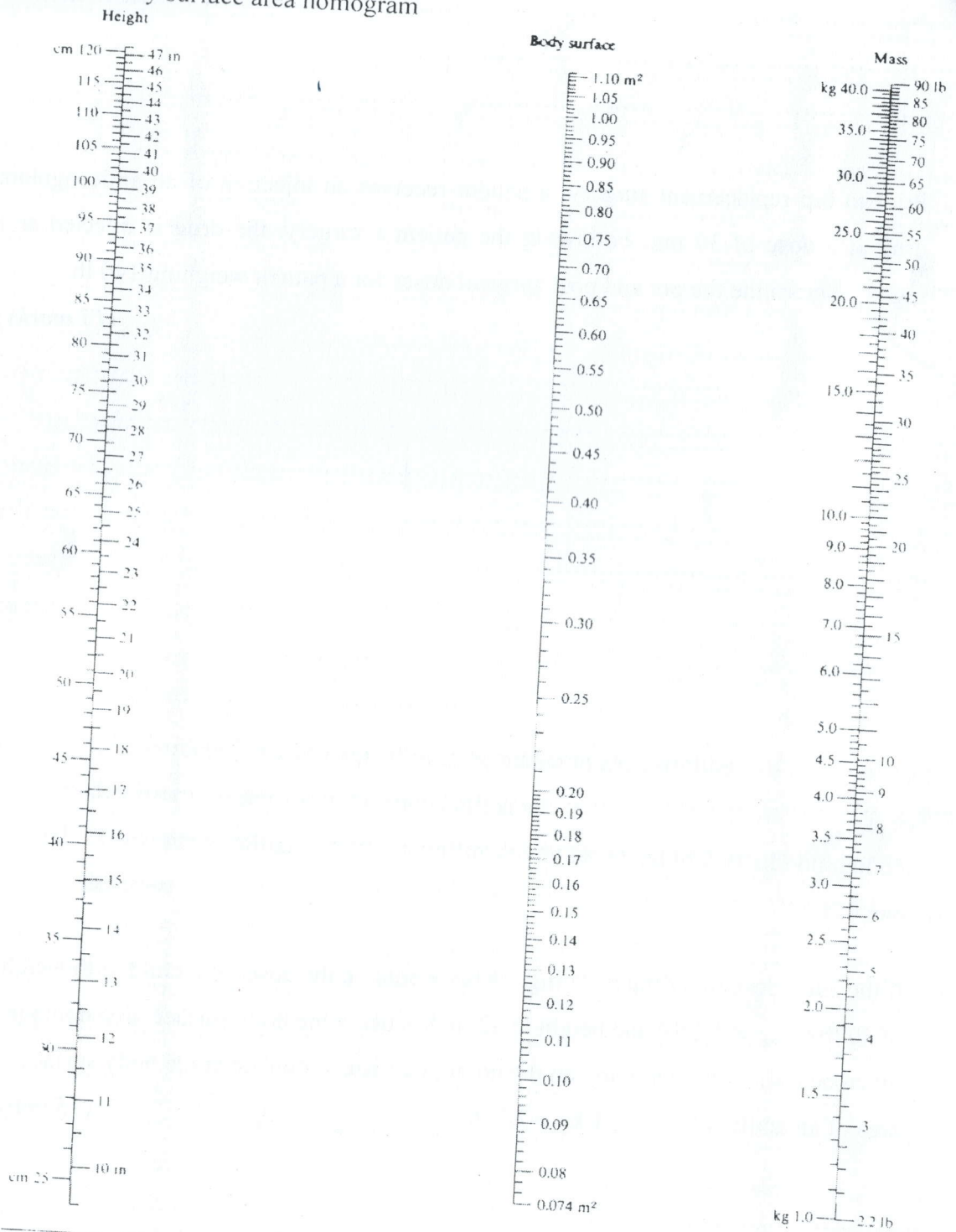
1.3. Briefly explain the following methods used to determine the particle size.
1.3.1. Sieving (25 marks)

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The body surface area nomogram



From the formula of DuBois and DuBois. *Arch intern. Med.*, 17, 863 (1916). $S = M^{0.725} \times H^{0.725} \times 71.84$,
 or $\log S = \log M \times 0.425 + \log H \times 0.725 + 1.8564$ (S: body surface in cm², M: mass in kg, H: height in cm).

4.1.3. Based on your calculation, from where do you think the most of the loratadine will be absorbed? (10 marks)

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4.2. Define following terms.

4.2.1. A supersaturated solution. (15 marks)

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4.2.2. Tonicity. (15 marks)

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4.3. Differentiate between “adsorption” and “absorption” processes. (20 marks)

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