



FACULTY OF ALLIED HEALTH SCIENCES, UNIVERSITY OF RUHUNA

Department of Nursing

3rd End Semester Examination – 2026 – 2022/2023-16th (Old) Batch

NUR 2111 – Pharmacology in Nursing I – SEQ

Date: 9th July 2026

Time: 9.30 a.m.-10.00 a.m.

Duration: 1/2 hour

Index Number:

Answer all questions using the space provided.

1. Pharmacokinetics is defined as “what the body does to the drug when administered”.

1.1. Write the **four (04)** steps of pharmacokinetics. (20 marks)

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1.2. Define bioavailability. (10 marks)

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1.3. Mention how the bioavailability of an oral drug differs from that of an intravenously administered drug. (10 marks)

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- 1.4. Continuous beta blocking drug therapy leads to beta adrenoceptor up-regulation. Explain receptor up-regulation and down-regulation in relation to treatment with agonists and antagonists. (20 marks)

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- 1.5. Describe the potency of a drug using dose-response curve. (20 marks)

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1.6.

- 1.6.1. Calculate the therapeutic index of drug A using the parameters given below using the standard formula. (10 marks)

Toxic Dose 50 (TD 50) = 500 mg, Effective Dose 50 (ED 50) = 50 mg

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1.6.2. Mention your opinion regarding the therapeutic index of the above drug. (10 marks)

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