



**University of Ruhuna- Faculty of Technology**  
**Bachelor of Information and Communication Technology Honours Degree**  
**Level I (Semester I) Examination, November/December 2025**  
**Academic year 2023/2024**

**Course Unit: ICT1161, Fundamentals of Information Systems (Written)**

**Duration: 1.5 hours**

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This paper contains **three (03)** pages including this instruction page.

**IMPORTANT INSTRUCTIONS:**

1. The medium of this examination is **English**.
2. This is a **Closed Book** examination.
3. This Examination consists of **three (03)** questions that are given equal marks.
4. You must answer **all three (03)** questions in this examination.

- 1)
- a) Briefly define the following terms relevant to information systems. *(15 Marks)*
    - i. Data
    - ii. Information
    - iii. Knowledge
  - b) List down *five (05)* characteristics of valuable information relevant to Information Systems. *(10 Marks)*
  - c)
    - i) Define what is a Computer Based Information System? (CBIS). *(10 Marks)*
    - ii) Briefly describe *four (04)* components of a Computer Based Information System. *(20 Marks)*
  - d) Briefly explain *two (02)* global challenges in Information Systems. *(20 Marks)*
  - e)
    - i) Explain the term “**Organization**” with a relevant example. *(10 Marks)*
    - ii) An organization’s structure depends on its goals and approach to management and can affect how it views and uses information systems. Briefly explain how the Traditional organizational structure differs from Flat organizational structure. *(05 Marks)*
- 2)
- a) Why are people moving to E-Commerce over traditional methods of commerce? briefly explain using *three (03)* key points *(15 Marks)*
  - b) Briefly explain *four (04)* types of E-commerce, providing one example for each type. *(40 Marks)*
  - c) Mention *three (03)* key purposes of the concept e- Government. *(15 Marks)*
  - d) “Mobility is a common benefit that can be obtained from M-Commerce.”
    - i) Do you agree with the above statement? *(05 Marks)*
    - ii) Justify your answer. *(15 Marks)*
  - e) Briefly explain *two (02)* disadvantages of M-commerce. *(10 Marks)*

3)

- a)
  - i) List *two (02)* objectives of a Transaction Processing System (TPS). *(10 Marks)*
  - ii) Briefly explain the steps of the Transaction Processing Cycle. *(18 Marks)*
- b)
  - i) Define what is a Customer Relationship Management System. *(12 Marks)*
  - ii) Briefly explain *three (03)* key features of a CRM system *(15 Marks)*
- c)
  - i) What is meant by an “Executive Support System”? *(10 Marks)*
  - ii) List *two (02)* characteristics of an Executive Support System. *(20 Marks)*
- d) A financial services firm hires a development team to create a real-time loan approval system that must quickly adapt to frequent regulatory updates and changing customer expectations. The firm requests early demonstrations of partial system features, so loan officers can test data entry screens, validation rules, and decision logic. They also anticipate several rounds of modifications before final deployment.
  - i) State whether a prototyping-based iterative development approach or a traditional system development approach would be more appropriate for the above scenario. *(05 Marks)*
  - ii) Give one valid reason for your decision. *(10 Marks)*

**\*End Of the Question Paper\***