



**University of Ruhuna – Faculty of Technology**  
**Bachelor of Information & Communication Technology Honours Degree**  
**Level 2 (Semester II) Examination – November/December 2025**  
**Academic Year: 2023/2024**

**Course Unit: ICT2242 – Management Information Systems (Written)**

**Duration: 2 hours**

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This paper contains **05 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 **four (04)** questions that are given equal marks.
4. You must **answer all four (04)** questions in this examination.

1. **Global Tread Tyres (Pvt) Ltd.** is a Sri Lankan-based manufacturing company that produces a wide range of tires for cars, motorcycles, trucks, and agricultural vehicles. The company operates through several departments including Production, Sales and Marketing, Research & Development, Payroll (HR), and Shipping all coordinated through an integrated management system. The **Sales and Marketing Department** conducts market research and identifies rising demand for **different types of tires** in both local and export markets. The Research and Development department recently introduced an **eco-friendly, fuel-efficient car tire named "EcoGrip"**. A key customer **AutoZone Distributors (Pvt) Ltd.** responds to the marketing campaign and sends an **inquiry** for 2,000 units of the new "EcoGrip" tire model. A sales order was generated through the integrated system within a short time period and negotiated the final price with AutoZone. Once approved, a Sales Order is created in the system, specifying tire model, quantity, unit price, delivery date, and payment terms. The sales order automatically updates the production and shipping departments' schedules. This integrated system records all daily routine transactions and provides a platform to monitor the status of internal operations for managers while ensuring smooth coordination among different departments and supports decision making process of the business.

a. Identify the Information System type used to control operations in the Global Tread Tyres (Pvt) Ltd. Give **two (02)** reasons for the identification.

[20 Marks]

b. List **three (03)** main activities of the information system used in the Global Tread Tyres (Pvt) Ltd.

[15 Marks]

c. Briefly explain how this integrated information system helps to increase responsiveness to customer demands.

[10 Marks]

d. The company has to deal with many suppliers all over the world to get different raw materials for its production process.

i. What is the goal of the Supply Chain Management (SCM) system in the above-mentioned business?

[10 Marks]

ii. What kind of information do they need to share with their suppliers to manage the supply chain process smoothly?

[10 Marks]

iii. Explain the importance of internet-related technologies in supply chain management.

[15 Marks]

e. Based on the given scenario of Global Tread Tyres (Pvt) Ltd., explain how a Knowledge Management System (KMS) could enhance organizational learning, collaboration, and decision-making across departments such as Sales and Marketing, Production, and Research & Development.

[20 Marks]

2. SmartAgro (Pvt) Ltd. is a Sri Lankan technology-driven agribusiness company that develops smart farming solutions for small and medium scale farmers across the island. The company's main goal is to help farmers increase productivity through data driven insights, weather forecasting tools, and mobile based advisory services.

The company operates through several departments like Product Development, Marketing, Customer Support, and Research & Analytics, that must work closely together to launch new digital products successfully. To achieve this, SmartAgro uses a cloud-based collaboration platform (such as Microsoft Teams and Google Workspace) that allows employees from different departments and regions to share documents, discuss ideas, and coordinate project tasks in real time.

The management emphasizes the importance of collaboration and teamwork, as most of the company's innovation comes from cross-functional teams combining IT developers, agricultural scientists, and marketing professionals. Through teamwork, employees can exchange expertise, solve customer issues faster, and develop new features like "SmartCrop Advisor," which provides personalized farming tips.

Recently, SmartAgro decided to adopt social business tools such as internal social networks and online communities to improve communication with farmers and partners. Using platforms similar to Facebook Workplace and WhatsApp Business, they created digital communities where farmers can share experiences, upload photos of crop issues, and receive expert advice instantly.

The integration of **social business applications** has led to several **business benefits**:

- Improved communication and trust between the company and farmers.
- Faster response to customer queries through online interactions.
- Increased innovation through feedback loops from the farming community.
- Enhanced employee engagement and knowledge sharing within the company.

Based on the SmartAgro (Pvt) Ltd. business scenario, answer the questions below.

a. What is meant by collaboration in a business context?

[10 Marks]

- b. Why do collaboration and teamwork essential for SmartAgro's success?  
[20 Marks]
- c. What is social business, and how is it applied in this organization?  
[20 Marks]
- d. Identify **two (02)** applications of social business in SmartAgro.  
[10 Marks]
- e. Discuss **two (02)** business benefits SmartAgro gains from collaboration and social business tools.  
[20 Marks]
- f. Top management has decided to recruit a chief security officer for the SmartAgro (Pvt) Ltd. Explain the importance of a chief security officer's role in the SmartAgro (Pvt) Ltd.  
[20 Marks]
3. Lanka Fresh Foods (Pvt) Ltd. is a rapidly growing Sri Lankan company that processes and distributes packaged fruits, vegetables, and dairy products to supermarkets and hotels across the country. The company operates multiple departments including procurement, production, quality control, inventory management, sales and marketing, Human Resource, and Payroll. They maintain a strong supplier base as they always deal with fresh product distribution. As the business expands, Lanka Fresh faces challenges such as stock mismatches, delays in production planning, duplicated data, and poor visibility across departments. To overcome these issues, Lanka Fresh expects to implement an **Enterprise Resource Planning (ERP) System** to integrate all its business processes into a single platform. Some long-serving employees are demonstrating resistance to the implementation of ERP as they are not familiar with the required technical aspects.
- a. What is the technical definition of an organization?  
[10 Marks]
- b. Bargaining power of suppliers is a main factor among Porter's Five Forces model. List **three (03)** concerns affecting the bargaining power of suppliers in Lanka Fresh Foods (Pvt) Ltd.  
[15 Marks]
- c. List **five (05)** major functional areas that need to be included in Lanka Fresh Foods (Pvt) Ltd. ERP system. Briefly describe **one (01)** of them.  
[25 Marks]

d. "Employee training can be considered as a hidden cost of ERP implementation."  
Do you agree with this statement? Justify your answer with reference to the Fresh  
Foods (Pvt) Ltd. scenario.

[20 Marks]

e. List **two (02)** advantages and **two (02)** disadvantages of ERP systems and describe  
**one (01)** advantage and one **(01)** disadvantage.

[30 Marks]

4.

a.

i. List **four (04)** unique features of E-Commerce.

[10 Marks]

ii. "Digital market enables dynamic pricing." Do you agree with this statement?  
Justify your answer using **two (02)** key points.

[20 Marks]

b.

i. List down **three (03)** important dimensions of knowledge.

[15 Marks]

ii. Briefly explain the importance of an Enterprise Content Management System  
for an organization.

[20 Marks]

c.

i. List down **three (04)** key technology trends that raise ethical issues.

[10 Marks]

ii. Briefly explain why "Organizational inertia and politics" always become a  
reason for not producing positive results for IT investment in organizations.

[15 marks]

iii. Based on Mintzberg's 10 managerial roles, write short notes on the  
managerial roles below.

- Figurehead
- Disseminator

[10 Marks]

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