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**CERTIFIED PUBLIC ACCOUNTANT  
FOUNDATION LEVEL 2 EXAMINATIONS**

**F2.3: INFORMATION SYSTEMS**

**DATE: TUESDAY 27, AUGUST 2024**

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**INSTRUCTIONS:**

- 1. Time Allowed: 3 hours 15 minutes (15 minutes reading and 3 hours writing).**
- 2. This examination has seven questions and only five questions should be attempted.**
- 3. Marks allocated to each question are shown at the end of the question.**
- 4. The question paper should not be taken out of the examination room.**

## QUESTION ONE

KDH Tech Company is a medium-sized retail chain with many sites across the country, having issues with its current IT infrastructure. The current setup comprises dispersed servers and old networking equipment, which causes frequent downtime, slow-paced transaction processing times, and trouble keeping consistent data across all stores, which are hindering operational efficiency and growth. Therefore, the company is proposing to use cloud computing to reduce its investment in IT infrastructure.

### Required:

**a) Describe FIVE Information Technology infrastructure elements that could be upgraded or implemented to address challenges faced by KDH Tech Company effectively. (10 Marks)**

**b) Briefly describe TEN advantages of cloud computing. (10 Marks)**

**(Total: 20 Marks)**

## QUESTION TWO

UMUYENZI Corp is a manufacturing company with approximately 300 employees. The company's rapid growth highlighted several inefficiencies and security risks in its existing IT infrastructure, which was a mix of outdated hardware, disparate software systems, and inadequate security protocols. The disarray in data and file organization has resulted in inefficiencies, security vulnerabilities, and difficulties in collaboration among teams. The leadership decided to invest in a comprehensive company to overhaul of its IT infrastructure, focusing on improving data and file organization to address these issues.

### Required:

**a) Discuss five major challenges in creating and maintaining coherent IT infrastructure categories of computer assets that may need to be assessed. (10 Marks)**

**b) Describe five issues that affect the management of organizational data. (5 Marks)**

**c) State five problems associated with the traditional file environment. (5 Marks)**

**(Total: 20 Marks)**

### QUESTION THREE

GWIZA Solutions is an online retailer specializing in consumer electronics. With rapid growth over the past few years, the company has seen a surge in sales and an expanding customer base. The company faced challenges in managing customer relationships and maintaining an efficient supply chain. Sales representatives and field service professionals lacked real-time access to **Customer Relationship Management (CRM)** data, leading to delays and inefficiencies in customer service and order fulfillment. Additionally, the supply chain processes were fragmented, causing delays and inventory issues. However, with rapid growth came several management challenges that threatened to hinder its progress and operational efficiency, and customer satisfaction. To address these challenges, GWIZA Solutions decided to implement a wireless CRM solution and integrate it with its supply chain management (SCM) system.

#### Required:

- a) **Provide five ways in which wireless customer relationship management (CRM) would enable sales and field service professionals.** (5 Marks)
- b) **Outline five main supply chain processes.** (5 Marks)
- c) **Describe five management challenges of E-commerce.** (5 Marks)
- d) **Outline five enterprise applications supporting customer relationship management (CRM) and supply chain management (SCM).** (5 Marks)

**(Total: 20 Marks)**

### QUESTION FOUR

IKAZE Tech Inc. is a multinational corporation specializing in innovative technology solutions. To support its growth and maintain a competitive edge, IKAZE Tech decided to invest heavily in information systems (IS). The company aimed to streamline operations, enhance decision-making, and improve customer service through advanced information systems IS implementations. However, the journey was fraught with several problem areas that needed to be addressed to realize the full business value of these systems.

#### Required:

- a) **Describe value of systems from a financial perspective and four limitations of financial models for estimating the value of information systems.** (10 Marks)

- b) Discuss information system failure and the FOUR major information systems problem areas. (10 Marks)**  
**(Total: 20 Marks)**

### **QUESTION FIVE**

Fintech Inc. is a global financial services company providing online banking, investment management, and e-commerce payment solutions. As the company expanded its digital presence, it faced several legal challenges related to management information systems (MIS), terrorism financing, money laundering, and e-commerce. To ensure compliance and secure operations, Fintech needed to address these legal issues while maintaining service efficiency and customer trust.

**Required:**

- a) Discuss the following key legal issues faced in managing information systems**
- i) Two key legal issues in data privacy and protection. (4 Marks)**
  - ii) Two key legal issues in intellectual property rights. (4 Marks)**
  - iii) One key legal issue in data sovereignty. (2 Marks)**
- b) State the following key challenges faced by financial services companies in the**
- i) Three key challenges in combating terrorism financing. (3 Marks)**
  - ii) Three key challenges in money laundering. (3 Marks)**
  - iii) Four key challenges in securing e-commerce operations. (4 Marks)**
- (Total: 20 Marks)**

### **QUESTION SIX**

IRIZA Com Inc. is a leading telecommunications company offering a wide range of services, including broadband internet, mobile communications, and enterprise network solutions. As the company expanded its services and infrastructure, it faced various management opportunities and challenges across telecommunications, network, internet, wireless technologies, and enterprise systems. To remain competitive and efficient, IRIZA Com needed to leverage these opportunities while addressing the inherent challenges.

**Required:**

- a) Describe the following :**
- i) SIX opportunities of wireless technology to business. (6 Marks)**
  - ii) TWO management challenges caused by wireless technology to business. (4 Marks)**
- b) Outline TEN enterprise systems challenges. (10 Marks)**  
**(Total: 20 Marks)**

## QUESTION SEVEN

BAHONEZA is a rapidly growing healthcare provider that offers a range of medical services through a network of hospitals, clinics, and telemedicine platforms. To improve patient care and operational efficiency, BAHONEZA decided to develop and implement a comprehensive Health Information System (HIS). This system aimed to integrate patient records, streamline administrative processes, and enable data-driven decision-making across the organization. However, the project faced numerous system development and management challenges that needed to be addressed to ensure its success.

### Required:

- a) Briefly discuss FIVE stages of software development. (10 Marks)
- b) Describe THREE management challenges and SEVEN solutions in the system development process. (10 Marks)

(Total: 20 Marks)

**End of question paper**





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