INTERNATIONAL UNIVERSITY OF EAST AFRICA
'Learning to Succeed'

FACULTY OF SCIENCE AND TECHNOLOGY

END OF SEMESTER EXAMINATIONS - AUGUST 2025

PROGRAMME: BIT
YEAR/SEM: YEAR 3/SEMESTER 2
COURSE CODE: BIT3201
NAME: STRATEGIC IT & MANAGEMENT

DATE:
TIME:

INSTRUCTIONS TO CANDIDATES:

SECTION A

Attempt All Questions

Question 1:

Busoga Courier Services, a delivery company based in Jinja, Uganda, has recently lost many customers to digital competitors like **SafeBoda** and **Glovo**. Their operations are still manual, they lack real-time tracking systems, and their website frequently crashes. The company admits it never had a formal Information Systems/IT strategy and only buys technology when problems occur. You have been hired as a consultant to help them understand the importance of a good IS/IT strategy and how to fix their mistakes.

Answer the following questions:

a. What is an IS/IT strategy? *(2 marks)*

b. List and explain **three** key components of a good IS/IT strategy. *(3 marks)*

c. Why is it important for a company like Busoga Courier to have an IS/IT strategy? *(2 marks)*

d. How can Busoga Courier use IT to improve customer service and delivery speed? *(3 marks)*

e. Mention **two internal** reasons (within the company) that may have led to poor IT planning at Busoga Courier. *(2 marks)*

f. Mention **two external** reasons (from outside the company) that may have affected their IT strategy. *(2 marks)*

g. Why do some managers in Ugandan companies avoid investing in IT strategy? *(3 marks)*

h. How can poor communication between departments lead to a weak IT strategy? *(3 marks)*

i. What are the main business goals of Busoga Courier Services? *(2 marks)*

j. Suggest **three ways** that Busoga Courier can align its IT investments with its business goals. *(3 marks)*

k. What role should top management play in supporting IT strategy? *(3 marks)*

l. What are **two short-term** effects of a poor IT strategy on a company's operations? *(2 marks)*

m. What are **two long-term** effects of not having a clear IT strategy? *(2 marks)*

n. How can customer trust be affected by weak digital systems? *(2 marks)*

o. Name a Ugandan or East African company that failed due to poor IT or digital planning. *(1 mark)*

p. Briefly explain what happened to that company. *(2 marks)*

q. What **two lessons** should Busoga Courier learn from that company's mistake? *(3 marks)*

Question 2:

Uganda Mart Ltd is a fast-growing retail company based in Kampala with branches in several districts. The management has recently realized that despite investing heavily in ICT tools, their operations are not well integrated, leading to duplication of efforts, poor decision-making, and high operational costs. The Board of Directors has proposed that the company undertake **Strategic IT Planning** to align IT initiatives with business goals, improve operational efficiency, and achieve long-term competitiveness.as a consultant hired to support this process, respond to the following questions:

a) Define **Strategic IT Planning** and explain its importance to a company like Uganda Mart Ltd.
(5 marks)

b) List and explain any **four key objectives** of strategic IT planning that Uganda Mart Ltd should focus on.
(8 marks)

c) Describe the **main procedures and principles** Uganda Mart Ltd should follow when developing a strategic IT plan.
(8 marks)

d) Discuss the **role of IT** in achieving Uganda Mart Ltd's business goals, particularly in retail operations.

(7 marks)

e) Explain what is meant by **technical standardization** and analyze how it can contribute to successful strategic IT planning in a multi-branch organization like Uganda Mart Ltd.
(7 marks)

f) Identify and explain **any two risks or consequences** Uganda Mart Ltd might face if they fail to implement an effective strategic IT plan.
(5 marks)

SECTION B

Choose any Three(3) Questions

Question 1:

You are an IT strategy consultant working with *SwiftDrop*, a Ugandan startup preparing to launch an app-based delivery service targeting urban and peri-urban areas. The founders are eager to ensure that their investment in IT infrastructure and product development results in long-term success and sustainability. They have limited experience with IT planning and need help understanding how the product lifecycle affects their strategy.

a) Explain two critical components of IT infrastructure that SwiftDrop should prioritize before launching the app. (4 marks)
b) Identify the current stage of the product lifecycle for the SwiftDrop delivery app and justify your answer. (4 marks)
c) Describe two challenges that startups typically face in the introduction stage of the product lifecycle and how these can affect IT planning. (4 marks)
d) Suggest one IT-based strategy that could help extend the lifecycle of the app and explain how it would be implemented. (4 marks)
e) Outline two reasons why aligning IT planning with the product lifecycle is important for a startup's long-term sustainability. (4 marks)

Question 2:

TopTech Uganda Ltd is a local company based in Kampala that developed and launched a mobile money management app called **"MobiCash"** in 2019. When it was first released, many small businesses and mobile money agents found it useful for tracking daily transactions. Over the past year, however, the number of downloads has decreased, and many users are switching to other apps with newer features like mobile banking integration and customer analytics. The company's management is unsure whether to improve the current app or begin developing a new product.

Using the information provided, answer the following questions:

a) What is the Product Life Cycle (PLC) model?
(2 marks)

b) List and briefly explain the four stages of the Product Life Cycle.
(4 marks)

c) Which stage do you think **MobiCash** is currently in? Give a reason for your answer.
(2 marks)

d) Mention two possible reasons why users may have lost interest in **MobiCash**.
(4 marks)

e) Suggest three ways **TopTech Uganda Ltd** can extend the life of the **MobiCash** app.
(6 marks)

f) Why is it important for companies to understand the Product Life Cycle when managing

technology products?
(2 marks)

Question 3:

You have been appointed as a junior strategic analyst at **FreshTech Ltd**, a Ugandan company that develops agricultural technology solutions for smallholder farmers. The company is facing stiff competition from foreign brands entering the Ugandan market, and there is growing concern over rising input costs, shifting customer demands, and regulatory changes related to digital agriculture. The management has asked your team to conduct a strategic analysis and provide recommendations on how the company can improve its position in the market.

Based on the scenario above, answer the following questions:

a. Define **strategic analysis** and explain its purpose in organizational planning.
(2 marks)

b. Identify and briefly describe any **three strategic analysis tools** that could be used to analyze FreshTech Ltd's internal and external environment.
(3 marks)

c. Using the scenario, complete a **SWOT analysis** for FreshTech Ltd by listing one point under each of the following:

- Strength
- Weakness
- Opportunity
- Threat
  (4 marks)

d. Explain how the **SWOT matrix** can help FreshTech Ltd align its internal strengths with external opportunities.
(3 marks)

e. Conduct a **PEST analysis** by identifying one relevant Political, Economic, Social, and Technological factor that could affect FreshTech Ltd.
(4 marks)

f. Briefly describe how **Porter’s Five Forces Analysis** could help FreshTech Ltd understand its industry competition.
(2 marks)

g. What are **early warning systems** in strategic analysis, and how might FreshTech Ltd benefit from using them?
(1 mark)

h. Suggest one **future strategic recommendation** for FreshTech Ltd based on your analysis.
(1 mark)

Question 4:

You are working as an IT risk officer at **NITA-U (National Information Technology Authority - Uganda)**. The agency is planning to launch a new centralized digital health

records system across all public hospitals in Uganda. While the system promises improved service delivery and data-driven decision-making, there are major concerns about system security, data privacy, and the possibility of system failure or cyberattack.

As the assigned risk manager, you have been asked to assess the risks involved and recommend a structured risk management approach to protect the organization and ensure successful implementation.

Questions:

a) Define what a risk is in the context of IT project implementation. *(2 marks)*
b) Briefly explain what risk management is and its importance in IT projects like this one. *(3 marks)*
c) Identify and explain **three possible risks** associated with the national digital health records system. *(3 marks)*
d) Outline any **three risk mitigation options** you could apply to address these risks. *(3 marks)*
e) Describe the key steps involved in conducting a risk analysis and assessment. *(3 marks)*
f) Explain what **impact analysis** means and how it would apply in this scenario. *(2 marks)*
g) Compare **COBIT** and **FRAP** in the context of risk analysis. *(2 marks)*
h) List the **steps of FRAP** and state **one advantage and one disadvantage** of using it in this scenario. *(2 marks)*

Question 5:

AgriSmart Technologies Ltd is a Kenyan agricultural technology company that provides digital tools and smart sensors to smallholder farmers. Recently, AgriSmart has been facing increasing competition from both local startups and international agri-tech firms. To remain competitive, the management team is reviewing its strategic options for building a strong competitive advantage using information technology (IT), pricing, and product differentiation.

Answer the following questions based on the scenario above:

a. Define *competitive advantage* and explain why it is critical for AgriSmart Technologies Ltd in today's competitive environment.
(3 marks)

b. Briefly describe Michael Porter's model of competitive advantage.
(3 marks)

c. Explain how AgriSmart could apply the **cost leadership strategy** in its operations and give one relevant example.
(3 marks)

d. Outline **three key ways** AgriSmart can achieve **low-cost leadership** without compromising quality.
(3 marks)

e. Discuss how AgriSmart could use a **differentiation strategy** to stand out from its competitors. Give one example relevant to its agri-tech services.
(3 marks)

f. Identify **two major drivers of differentiation** that AgriSmart could focus on and justify your choice.

(2 marks)

g. Explain how the use of **IT systems** (e.g., mobile platforms, data analytics, cloud services) can contribute to AgriSmart's competitive advantage.
(3 marks)

Question 6:

Kivu Retail Group, a fast-growing Congolese retail and distribution company headquartered in Goma, is expanding its operations across Central and East Africa. With rising customer demand for digital services and regional supply chain coordination, management is evaluating how to strengthen collaboration between business and IT teams. Currently, IT decisions are made centrally at the head office, but branch offices in Bukavu, Kinshasa, and Lubumbashi are requesting more autonomy to respond to local market needs. The company is also exploring outsourcing parts of its IT services to optimize costs and service delivery.

As the newly appointed IT Strategy Consultant, you are tasked with evaluating and recommending the best organizational and IT governance structure for Kivu Retail Group.

a)
i. What does collaboration between business and IT involve in an organization like Kivu Retail Group? *(1 mark)*
ii. Identify and explain two ways poor collaboration might negatively affect the company's growth. *(1 mark)*
iii. Suggest two benefits of establishing a strong collaborative framework between the business and IT units. *(2 marks)*

b)
i. Briefly describe two possible organizational structures suitable for IT departments. *(1 mark)*
ii. Which structure is most appropriate for a company with multiple regional branches? *(1 mark)*
iii. Justify your recommendation with two specific reasons tailored to Kivu Retail Group's situation. *(2 marks)*

c)
i. Define centralized and decentralized IT structures. *(1 mark)*
ii. List two advantages and two disadvantages of a centralized IT model for Kivu Retail Group. *(2 marks)*
iii. Why might decentralization be more appropriate for some functions as the company expands? *(1 mark)*

d)
i. Define IT sourcing and explain the difference between insourcing and outsourcing. *(1 mark)*
ii. Recommend a suitable sourcing model for Kivu Retail Group (e.g., full outsourcing, selective outsourcing, co-sourcing). *(1 mark)*
iii. Mention two key criteria that should guide the company's decision to outsource certain IT functions. *(1 mark)*
iv. Give one example of an IT function that could be outsourced and explain why. *(1 mark)*

e)
i. What is an IT decision-making structure, and why is it critical for digital transformation? *(1 mark)*
ii. Outline three steps the company should follow in developing a suitable decision-making framework. *(2 marks)*

iii. How can the company ensure that the structure remains effective as it continues to grow? *(1 mark)*

Question 7:

MTN Uganda, a leading telecommunications provider, is expanding its services across East Africa with a focus on digital transformation. As part of its strategic IT planning, the company is prioritizing **technical standardization** to improve system interoperability, ensure efficient service delivery, and manage IT innovations. However, regional offices are using different technologies, and there's inconsistency in data exchange formats and software platforms. The CIO has directed the IT team to develop and communicate a unified **technical standardization blueprint** to support this growth and innovation strategy.

Questions:

a. Define technical standardization and explain its scope within strategic IT planning. *(3 marks)*

b. Identify and explain **three objectives** of technical standardization in an organization like MTN Uganda. *(3 marks)*

c. Describe the **contribution** of technical standardization to the success of strategic IT planning. *(3 marks)*

d. Outline the **standardization process** that MTN Uganda should follow when implementing new IT systems across regional offices. *(3 marks)*

e. What is a **technical blueprint** in the context of IT standardization, and how should it be maintained and communicated in a growing company? *(3 marks)*

f. Differentiate between **'black-box' standardization** and **'white-box' standardization**. Give one advantage of each. *(3 marks)*

g. How can MTN Uganda use **IT innovation management** alongside technical standardization to stay competitive in the telecom sector? *(2 marks)*

Question 8:

Barwaaqo AgroTech Ltd, a medium-sized agro-processing company in Somalia, specializes in producing and distributing packaged camel milk and organic dried fruits. Facing increased competition and rising operational costs, the company's management is exploring strategies to enhance performance, reduce costs, and improve customer value. The IT Manager has proposed a digital transformation strategy that includes the implementation of an ERP system, data analytics tools for market trends, and automation of key production processes. However, the company's board remains uncertain about the role of IT in driving real business value.

Answer the following questions based on the scenario:

a) Explain three ways IT can serve as a value driver for Barwaaqo AgroTech Ltd. *(3 marks)*

b) How can IT be used as an enabler for business transformation in this company? Provide two examples. *(4 marks)*
c) In what ways can IT contribute directly to the company's end product or service? *(3 marks)*
d) Describe two value-oriented IT management practices that could help Barwaaqo control and measure the performance of their IT investments. *(4 marks)*
e) Identify and explain two strategies through which IT can help reduce operational costs while improving efficiency. *(4 marks)*
f) As the IT consultant, what would you advise management to focus on to ensure IT delivers measurable business benefits? *(2 marks)*

Question 9:

PearlTech Solutions, a Ugandan tech company, offers several digital products across East Africa. Its portfolio includes a mobile payment platform (*PearlPay*), a declining desktop accounting software (*AccuBooks*), a recently launched AI-driven chatbot (*ChatPearl*), and a mature school management system (*EduSmart*). The management team is reviewing its IT strategy and deciding how to allocate resources using the **BCG Matrix** framework.

As a strategy consultant, you are hired to advise PearlTech on how IT can be used as a strategic resource for managing its product portfolio.

Answer the following questions:

a) How can PearlTech use IT to transform *ChatPearl* (a wildcat product) into a star product in the East African market? (4 marks)
b) What role does IT play in maintaining the efficiency and profitability of *EduSmart* (a cash cow)? (4 marks)
c) Suggest two appropriate IT strategies for *AccuBooks* (a dog product) to minimize losses or extract residual value. (4 marks)
d) Identify a real or hypothetical example of a product in each BCG Matrix category (wildcat, star, cash cow, dog) and briefly explain how IT supports each. (4 marks)
e) Explain how the different stages of the BCG Matrix influence IT investment priorities and budgeting decisions at PearlTech. (4 marks)

Question 10:

KampNet Telecom, a small but growing internet service provider in Uganda, is struggling to stay competitive. Its management team wants to understand how **Information Technology (IT)** can help the company improve operations, attract customers, and compete with larger telecom companies. The company provides three main services: broadband internet, mobile data packages, and VoIP (voice over internet protocol) services.

As a junior IT consultant, you have been asked to provide guidance on how KampNet can use IT as a **strategic resource** to boost its business.

Answer the following questions:

a) What does it mean to use IT as a *strategic resource* in a company like KampNet? (3 marks)
b) Identify and explain **two specific IT tools or systems** KampNet can adopt to improve customer service and retention. (4 marks)
c) How can KampNet use data analytics to make better business decisions? Give one practical example. (4 marks)
d) Suppose KampNet wants to introduce a mobile app. What strategic benefits would this app

bring to both the business and the customer? (4 marks)
e) What are some potential risks of depending too much on IT systems in small businesses? Mention two and suggest how they can be managed. (5 marks)

Question 11:

Information Technology (IT) plays a critical role in modern organizations across all sectors. Answer the following questions to demonstrate your understanding of general IT concepts and their applications in the real world:

a) Define Information Technology (IT) and explain how it differs from Information Systems (IS). (4 marks)
b) List and briefly describe any three **types of information systems** commonly used in organizations. (6 marks)
c) Explain how IT can improve **communication, decision-making, and efficiency** in a business setting. Provide one example for each. (6 marks)
d) Identify two **challenges** organizations face when implementing new IT systems and suggest one solution for each. (4 marks)

Question 12:

An effective IT strategy must not only align with an organization’s business goals but also address cybersecurity to protect digital assets and ensure long-term sustainability. Answer the following questions to demonstrate your understanding of how cybersecurity fits within IT strategic planning:

a) Define **IT strategy** and explain its importance in guiding organizational goals and technology use. (4 marks)
b) Explain how **cybersecurity** supports a successful IT strategy. Why must cybersecurity be considered a strategic priority rather than just a technical issue? (4 marks)
c) Identify and describe any **three key components** of an IT strategy that directly or indirectly relate to cybersecurity. (6 marks)
d) List **two common cybersecurity threats** and describe one strategic approach an organization can use to prevent or respond to each. (6 marks)