



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN
INFORMATION COMMUNICATION TECHNOLOGY
4TH YEAR 2ND SEMESTER
2024/2025 ACADEMIC YEAR
MAIN CAMPUS

COURSE CODE: ITB 1402

COURSE TITLE: STRATEGIC MANAGEMENT OF INFORMATION SYSTEMS

DATE:

TIME:

TIME: 2 HOURS

Instructions:

- 1. Answer Section A and any other TWO Sections**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates MUST hand in their answer booklets to the invigilator while in the examination room.**
- 4. Mobile phones are NOT allowed in the examination room.**

SECTION A: 30 Marks

1. Define Information Systems (IS) and explain their strategic importance. (3 marks)
2. What are the key components of IT infrastructure? (3 marks)
3. Differentiate between IT strategy and business strategy. (3 marks)
4. What is the role of IT governance in strategic management? (3 marks)
5. Explain the Systems Development Life Cycle (SDLC) in brief. (3 marks)
6. How does Cloud Computing impact business strategy? (3 marks)
7. What is Business Process Re-engineering (BPR), and why is it important? (3 marks)
8. Define Cybersecurity threats and give two examples. (3 marks)
9. What is the importance of Customer Relationship Management (CRM) in business? (3 marks)
10. List three emerging technologies that influence strategic information systems. (3 marks)

SECTION B: 20 Marks

1. How can organizations **align IT strategy with business goals**? Provide an example. (5 marks)
2. Discuss the **strategic planning models** used in IT management. (5 marks)
3. Explain the **role of IT governance** in decision-making with a real-world case study. (5 marks)
4. Evaluate the **challenges of managing IT resources** in a multinational company. (5 marks)

SECTION C: 20 Marks

1. Analyze the impact of **Business Process Management (BPM)** on organizational efficiency. (5 marks)
2. Compare the **Waterfall model vs Agile methodologies** in IS development. (5 marks)
3. How does **workflow automation** improve business efficiency? Provide a case example. (5 marks)

4. Discuss the **risks associated with IT project management** and suggest mitigation strategies. (5 marks)

SECTION D: 20 Marks

1. Evaluate the impact of **cybersecurity threats** on global organizations. (5 marks)
2. How do **legal and compliance frameworks** affect information security strategy? (5 marks)
3. Critically analyze the **risk assessment process** in IT project management. (5 marks)
4. Discuss the **ethical and privacy challenges** associated with data management in organizations. (5 marks)

SECTION E: 20 Marks

1. Design a strategic plan for integrating Artificial Intelligence into business processes.(5 marks)
2. How can Blockchain technology enhance supply chain management? Provide a model. (5 marks)
3. Propose an IT innovation strategy for a company undergoing digital transformation. (5 marks)
4. How can businesses leverage Predictive Technologies for competitive advantage? (5 marks)