



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS**  
**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN**  
**COMPUTER SECURITY AND FORENSICS**  
**2<sup>ND</sup> YEAR 2<sup>ND</sup> SEMESTER 2021/2022 ACADEMIC YEAR**  
**MAIN CAMPUS**

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**COURSE CODE: ICB 1204**

**COURSE TITLE: INFORMATION TECHNOLOGY POLICY AND STRATEGY**

**DATE:**

**TIME:**

**TIME: 2 HOURS**

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**Instructions:**

- 1. Answer Question 1 (Compulsory) and ANY other two questions**
- 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**

### QUESTION ONE 30 MARKS

- a) What is IT strategy? (2 marks)
- b) The IT strategy is divided into Eight (8) sections representing broad categories of IT functions. Identify any four sections. (4 marks)
- c) Why do organizations need to update IT strategy after some time? (4 marks)
- d) Why is it important for the executive management of an organization to create a framework for the use of Information Technology (IT) by integrating technology strategic planning into the overall corporate plan? (6 marks)
- e) Organizations find it important adopting policies and procedures to ensure safety and soundness and compliance with law and regulations. Justify why. (6 marks)
- f) Briefly explain the following terms. (8 marks)
  - 1. Policy
  - 2. Strategy
  - 3. Programme
  - 4. Project

### QUESTION TWO 20 MARKS

- a) Risk assessment is a very significant component in IT strategy. Why? (8 marks)
- b) In adopting E – Commerce policies and procedures to ensure safety and soundness and compliance with laws and regulations. Identify and discuss what the policies and procedures must address, when applicable. (8 marks)
- c) Why is developing an IT audit plan based on the results of the risk assessment important? (4 marks)

### QUESTION THREE 20 MARKS

- a) Many factors influence the process of formulating and implementing an effective Information Security Policy. Identify and explain the three main factors. (9 marks)
- b) Why is it necessary for continuous evaluation and revision of Information Security Policy? (3 marks)
- d) An organization needs a comprehensive written security plan to minimize exposure to all threats and risks. Security is the responsibility of every employee within the organization, not just those working in IT –related sections. Which critical sections of security should be captured in the security plan? (8 marks)

#### QUESTION FOUR 20 MARKS

- a) Identify and explain three key elements that any security program must address. (6 marks)
- b) Information Systems Planning has been defined as the ability to formulate the strategy of a business with the help of tools, techniques and methodologies used to support organizations in identifying potential opportunities to develop Information Systems (IS) with greater competitiveness. Information Systems Planning has been proposed as an integrated process which contains specific phases.
1. Identify the 5 phases involved. (5 marks)
  2. Briefly explain the phases identified in one (1) above. (9 marks)

#### QUESTION FIVE 20 MARKS

- a) How is ICT policy different from ICT? (3 marks)
- b) Why is it necessary for the business organization to develop, maintain and test business continuity plan? (9 marks)
- c) Discuss the four components of an ICT policy. (8 Marks)