



**ZIMBABWE EZEKIEL GUTI UNIVERSITY**

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**FACULTY OF SCIENCE, TECHNOLOGY, AGRICULTURE AND FOOD  
SYSTEMS DEVELOPMENT**

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**INFORMATION SYSTEMS DEPARTMENT**

**EXAMINATION PAPER**

**COURSE CODE** : BIS414  
**COURSE TITLE** : INFORMATION SYSTEMS SECURITY  
**DURATION** : 3 Hours  
**LEVEL** : 4.1  
**DATE** : 2025

09 APR 2025

**INSTRUCTIONS TO CANDIDATES:**

1. Answer ALL 4 questions
2. Each question carries 25 Marks.

### QUESTION 1

- a. Consider a scenario where a company's website is compromised via a cross-site scripting (XSS) attack. Discuss the steps an attacker might take during this attack and potential countermeasures the company could implement. [17 marks]
- b. Explain the concept of 'least privilege' in access control. [8 marks]

### QUESTION 2

- a. Analyze a case where a phishing attack successfully leads to credential theft. What methodologies did the attacker employ, and how could the target have better protected themselves? [25 marks]

### QUESTION 3

Analyze the importance of a remote work policy in today's organizational environment. What key elements should be included to ensure security? [25 marks]

### QUESTION 4

- a. Consider a scenario where a company discovers unauthorized access to its systems. Discuss how a computer audit could help investigate the incident and prevent future occurrences. [15 marks]
- b. What is the role of risk assessment in the development of a security strategy? [10 marks]

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