



# MANICALAND STATE UNIVERSITY OF APPLIED SCIENCES

## FACULTY OF SCIENCE AND TECHNOLOGY

DEPARTMENT: COMPUTER SCIENCE AND INFORMATION SYSTEMS

MODULE: CYBER SECURITY AND PROFESSIONAL ETHICS

CODE: INSY414

SESSIONAL EXAMINATIONS  
JUNE 2024

DURATION: 3 HOURS

EXAMINER: MS G. MUTIPFORO

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### INSTRUCTIONS

1. Answer ***all questions*** in section A and ***any three (3) questions*** in section B.
2. Start a new question on a fresh page
3. Total marks 100

## Question 1

### *Case Study: The Ethical Dilemma of a Data Breach*

Sarah is a software engineer working for a reputable tech company, CloudTech, known for its cloud storage solutions. Recently, she discovered a critical security vulnerability in CloudTech's servers that could potentially expose user data, including sensitive financial information. Sarah is conflicted. Reporting the vulnerability could lead to a temporary service outage and potentially damage CloudTech's reputation, potentially impacting her job security. However, keeping quiet could result in a massive data breach, exposing millions of users' personal information and potentially leading to financial loss, identity theft, and reputational damage for both CloudTech and its users.

a)

- i) Enumerate Sarah's ethical obligations as a software engineer. **[3 Marks]**
- ii) Outline the potential consequences of each of Sarah's options (reporting vs. staying silent). **[4 Marks]**
- iii) Highlight resources that are available to Sarah to help her make an ethically responsible decision. **[4 Marks]**
- iv) Outline the steps Sarah should take to address this ethical dilemma. **[6 Marks]**
- v) Provide advice that you would give Sarah in such a scenario. **[3 Marks]**

b) Outline and explain any five functions of the Data Protection Authority of Zimbabwe as prescribed in the Cyber law and Data Protection Act. **[10 Marks]**

c) How effective will the Cyber Security Act of 2021 be in addressing the issue of cybercrime in Zimbabwe? **[10 Marks]**

## SECTION B

### Question 2

a) Define the term Cyber Law and expound on the need of Cyber law in Zimbabwe.

**[8 Marks]**

b) Compare and contrast security, privacy and control. **[12 Marks]**

### **Question 3**

Explain the following terms as they are used in the Cyber law and Data Protection Act of Zimbabwe [CHAPTER 12:07]:

- i. Cyber terrorism; **[4 Marks]**
- ii. Cyber laundering; **[4 Marks]**
- iii. Cyber bullying ; **[4 Marks]**
- iv. Cyber stalking ; and **[4 Marks]**
- v. Phishing. **[4 Marks]**

### **Question 4**

a) Discuss any five (5) types of intellectual rights you are familiar with.

**[20 Marks]**

### **Question 5**

a) Discuss the impact of globalization on computer ethics.

**[20 Marks]**

**END OF EXAMINATION**