NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF COMMUNICATION AND INFORMATION SCIENCE

DEPARTMENT OF RECORDS AND ARCHIVES MANAGEMENT

INFORMATION SECURITY

IIM 2102

Main Examination

December 2024

This examination paper consists of 2 pages.

Time Allowed: 3 hours

Total Marks: 100

Examiner's Name: Mr C.T. Mutare

INSTRUCTIONS

1. Answer any **four (4)** questions.
2. Each question carries **25 marks**.

MARK ALLOCATION

QUESTION	MARKS
1.	25
2.	25
3.	25
4.	25
5.	25
6.	25

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1. Explain any five (5) pillars of information security. **[25 marks]**

2. Describe the functionality of Symmetric key cryptography, exploring its weaknesses, and suggest how Asymmetric key cryptography functions as a solution to those weaknesses. **[25 marks]**

3. Identify any five (5) cyber-attacks, explain the threat indicators and suggest the possible actions you may take to protect your information in the event of an attack. **[25 marks]**

4. Draft a Business Continuity Plan for an e-Commerce business of your choice. **[25 marks]**

5. Discuss any five (5) methods through which authentication processes have improved from the traditional username and password combination method. **[25 marks]**

6. a) Compare and contrast Firewall, Intrusion Detection System (IDS) and Intrusion Prevention System (IPS). **[15 marks]**

   b) Briefly describe the following risk terminologies:
i)	Risk	[1 mark]
ii)	Asset	[1 mark]
iii)	Asset valuation	[1 mark]
iv)	Threat	[1 mark]
v)	Threat agent	[1 mark]
vi)	Vulnerability	[1 mark]
vii)	Exposure	[1 mark]
viii)	Safeguard	[1 mark]
ix)	Attack	[1 mark]
x)	Breach.	[1 mark]

   [Total 25 marks]

END OF PAPER

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