

**ATTEMPT ALL QUESTIONS**

Select the best answer for the following question

1. Data \_\_\_\_\_ is used to ensure confidentiality.
  - A. Locking
  - B. Decryption
  - C. Backup
  - D. Encryption
  
2. Which of the following tool is used in Wi-fi hacking? **(1 Mark)**
  - A. Airckack-ng
  - B. Wireshark
  - C. Norton
  - D. None of the above
3. Which is true of signature-based Intrusion detection system?
  - A. It can not work with an intrusion prevention system
  - B. It only identifies on known signatures
  - C. It detects never-before-seen anomalies
  - D. It works best in large enterprises **(1 mark)**
4. What do you understand on authentication methods and Give three of them?
5. What is reference in documentation ?
6. Explain at least (2) main categories of physical threats
7. What is data archive in computer system?
8. Explain the Network design elements and components?
9. What is User Account Control (UAC)?
10. Explain the following Vulnerability scanning and penetration testing tools
  1. Wireshark
  2. OpenVAS
11. What is Legal compliance?
12. Identify 3 task that can be performed by using packet analyzer
13. Explain the information security life cycle?
14. By using list below, fill the following table
  - A. Baiting
  - B. Phishing
  - C. Trojan Horse
  - D. Ransomware
  - E. Scareware

Types of social engineering attacks	Types of Malware attacks

**15.** Design a CIA triad diagram explaining the three protections that must be extended over information.

**16.** Risk management identification is composed with three main stages, arrange them in the correct order.

1. Threat identification
2. Control identification
3. Asset identification

**17.** Explain Assessment techniques for risk analysis of a system security.

**18.** Differentiate intrusion detection system from intrusion prevention system according to its parameters in table below?

PARAMETER	Intrusion Prevention System	Intrusion Detection System
Abbreviation for		
System Type		
Detection mechanism		
Network performance impact		
Benefits		

**19.** If a wireless network is being accessed by an unauthorized user Describe any five (5) parameters to be set

**20.** Complete the below table by comparing threats and vulnerability of network system.

Data location	Security aspect	threats	vulnerability
Data in storage	integrity		
	availability		
	authentication		
Data In process	integrity		
	availability		
	authentication		

**21.** KL Ltd has system insecurity problem that is hindering their normal operations, assess that problem then explain the four (4) security system Adjustment that can be applied to enhance system protection.

**22.** Explain possible General solution to moderate common security threats to the network?

**23.** The KLB Company wants to set up a LAN so that their computers from different offices can

communicate and implement hardware firewall for network security to prevent DoS attacks. Design a network diagram that can be used for KLB Company and make a documentation related to that diagram.

**24.** ABL Ltd is a networking institution starting their activities in Rwanda and want to implement a secured system. As network and system administrator develop a security measure policy document describing any five (5) security measures that can be used for user credentials management.

**Success !!!!**