



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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UNIVERSITY EXAMINATIONS 2023/2024

FIRST YEAR SECOND SEMESTER EXAMINATION FOR DIPLOMA IN
INFORMATION TECHNICIAN

ICT/CU/IT/CR/3/6: CONTROL SECURITY THREAT

DATE: APRIL 2023

TIME: 3HOURS

INSTRUCTIONS: Answer Question ONE and any other THREE questions.

QUESTION ONE (40 MARKS)

1. Define the term computer security (2marks)
2. The following terms are often used in computer security. Explain (10marks)
 - a. Firewall
 - b. Hacking
 - c. Threat
 - d. Vulnerability
 - e. Risk
3. Explain THREE classification of Hackers (6marks)
4. Discuss THREE common categories of ICT security (6 marks)
5. Using an example in each case, discuss THREE goals of ICT security (6marks)
6. Outline FOUR important functions that information security performs for an organization (4marks)
7. Different organization would treat Risks differently depending on the type of the Risk. Outline any THREE ways treating a risk. (6marks)



SECTION B:(60 MARKS)

8. As ICT team in an institution after performing the risk Analysis. You have realized you need to implement information security Risk Management which involve four stages.
- a. Explain four stages ISRM (8marks)
 - b. Highlight any four benefits of Risk Analysis (8marks).
 - c. Discuss encryption as used in Information security (4marks)
9. Grace Park is large Hospital in Meru county, it is concerned about the security of its ICT systems and potential threats to the patient data and attacks from cyber criminals.
- a. As ICT security personnel discuss any five possible threat the Hospital should protect themselves against (10marks)
 - b. Explain any five crimes that can be performed by the cyber criminals(10marks)
10. DTB bank in Meru is planning to enhance it physical security measures to protect its ICT infrastructure from unauthorized access and potential threats.
- As a security consultant discuss
- a. Five physical security measures the bank could implement (10marks)
 - b. Five data security measure the bank could implement (10marks)
11. One of the most dangerous threat to data, information and computer system is computer virus. As an expert
- a. Explain what computer virus is (2marks)
 - b. Explain any THREE sources of computer virus (6marks)
 - c. Explain FOUR destructions and damages of virus in a computer system (8marks)
 - d. Explain FOUR example of computer virus (4marks)