NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF COMPUTING AND INFORMATICS
DEPARTMENT OF CYBER SECURITY

QUALIFICATION : BACHELOR OF COMPUTER SCIENCE HONOURS (DIGITAL FORENSICS)	
QUALIFICATION CODE: 08BHDF	**LEVEL: 8**
COURSE: DIGITAL FORENSICS MANAGEMENT	**COURSE CODE: DFM811S**
DATE: JUNE 2024	**PAPER: THEORY**
DURATION: 3HOURS	**MARKS: 100**

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	**MR. JULIUS SILAA**
MODERATOR:	**PROF. AMELIA PHILLIPS**

THIS QUESTION PAPER CONSISTS OF 2 PAGES
(Excluding this front page)

INSTRUCTIONS

1. Answer ALL the questions on the answer scripts.
2. Write clearly and neatly.
3. Number the answers clearly.

PERMISSIBLE MATERIALS

1. Calculator.

Question 1

In digital forensic investigation, there are five core areas of concern namely: integrity of evidence, extraction, interpretation of evidence, documentation, and rule of evidence. Discuss each of these areas of concern. (10 marks)

Question 2

A closer look at Network forensic investigation reveals that the procedure for collection, preservation, documentation e.t.c can be very cumbersome if compared to ordinary computer forensics investigations. Discuss how the following can pose challenges during a network forensics investigation. (12 marks)

a) Search warrant
b) Required time for evidence collection.
c) Byte by byte copy of network computer

Question 3

Digital forensics investigations can be categorized according to public-sector and private-sector themes.

a) Provide any three common examples of investigation in a private-sector environments (3 marks)

b) Unlike public sector investigation and prosecution which are more criminal or civil in nature, what is the main focus in private sector investigations? (2 marks)

c) As a forensic expert, what precaution should you exercise in any investigation involving private sector? (3 marks)

Question 4

a)Contrast traditional discovery from eDiscovery process (4 marks)
b)Discuss the following eDiscovery concepts and how each apply to civil investigation.

i. Legal hold
ii. Request for Production
iii. IGRM
iv. Spoliation
v. Technology Assisted Review (10 marks)

c)Funnel model is a historic model of eDiscovery. What is the ultimate goal of determining eDiscovery scope and how can the Reverse Funnel model be applied to determine targeted and broad eDiscovery scope? (8 marks)

Question 5

a) Ethical conduct is fundamental to maintaining the credibility and reliability of digital forensic investigations. Digital forensic professionals should adhere to these ethical principles to ensure that their work serves justice, protects privacy, and upholds the rule of law. Discuss any four ethical misconduct a certified computer examiner "will never" do. (8 marks)

b) Jason Daubert proposes five key questions (a.k.a Daubert Criteria for admissibility) which set a good starting point for drafting forensics validation reports for tools, techniques and methods that will hold up in a court of law. Briefly outline these five (5) questions. (10 marks)

Question 6

Write a well-structured one-page essay about Anti-Forensics. Your essay should among other things provide a short background of Anti-Forensics, at least 10 Anti-Forensics techniques and methods, summarize the key challenges of each technique and method, and propose possible investigative tactics for handling these challenges. (30 marks)

*******END OF PAPER*******