

School of Computing Science and Engineering

Bachelor of Technology in Computer Science and Engineering
Semester End Examination - Jun 2024

Duration : 180 Minutes
Max Marks : 100

Sem VI - E2UC515T - Introduction to Cyber and Digital Forensic

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) Outline the steps in cyber forensic investigation. K1(2)
- 2) Explain best practices to eliminate an insider attack. K2(4)
- 3) Elaborate on establishing a basis for cyber forensic investigation. K2(6)
- 4) Explain the key features and functionalities of FTK that make it a valuable tool in forensic investigations. K3(9)
- 5) Explain the process for reversing stenography. K3(9)
- 6) Identify the steps which follow detection of an incident. K5(10)
- 7) Organize the investigation of an ongoing hack on financial company who has in-house servers for data compilation and storage. K4(12)
- 8) Identify some of the most important reasons for conducting email investigations within your branch office with real time scenario. K5(15)
- 9) At 07:34 hours a 911 call was placed from the residence of Fred Mars. He states that a guest in his home, Red Fisher, is on the living room floor and unresponsive. Upon arrival by the EMS and Officers Gold and Freeman at 07:39 hours, the decedent was found on the floor.... On 6/25/2016, the decedent reportedly went to a party at the home of Fred Mars at 3400 Main Street. It is reported that the decedent was depressed and angry at having been fired from his job that day, and was allegedly using heroin and cocaine, as well as some other drugs. Sometime between 23:00 and 24:00 hours, Fred Mars and the decedent had a physical altercation, and according to Mars "He collapsed. I figured I knocked him out, or he passed out. I wasn't sure which. I rolled him over onto his back and he didn't wake up. I figured he would be angry when he woke up so I left him there and went to my girlfriend's house. When I got home after seven this morning, Red was still on the floor in the same position I left him, and wouldn't wake up. That's when I called 911." K5(15)

As a Head of Forensic Investigation Team, investigate how this incident might have occurred and gather the evidences in order to be admissible for the court?

10)

As a cyber forensics expert, explain why cyber forensics is used. Discuss forensic approaches in detail with your digital copy, authentication, and recovery. Explain the various procedures, types, and techniques utilised in digital forensics.

K6(18)