CE1.3-R4: CYBER FORENSIC & LAW

NOTE:

- 1. Answer question 1 and any FOUR from questions 2 to 7.
- 2. Parts of the same question should be answered together and in the same sequence.

Time: 3 Hours Total Marks: 100

1.

- a) What is the goal of forensic investigation? Write steps to do forensic investigation examination.
- b) Why organizations need to employ Cyber Forensic Analysis?
- c) What is Spoliation? Explain three component parts of spoliation.
- d) Explain how tools can be useful in acquiring following type non-volatile operating system data from the file system.

Users and Groups, Passwords, Network Shares, Logs

- e) What are the additional features supported by Network Forensic Analysis Tool to further facilitate network forensics?
- f) What does the common law say about privacy?
- g) Explain the use of recycle bin and restoring from recycle bin.

(7x4)

2.

- a) What is Auditing? Differentiate Auditing with Cyber Forensic Investigation in concern of following criteria. Definition, Objectives & Scope, Methodology and Impact
- b) Cryptographic algorithms will be categorized based on the number of keys that are employed for encryption and decryption. Explain following three categories of cryptographic algorithms.
 - i) Secret Key Cryptography
 - ii) Public Key Cryptography
 - iii) Hash Functions

(9+9)

3.

- a) What are different types of volatile operating system data? Explain how forensic tools can be used in collecting each type of data.
- b) What is Personal Digital Assistant? Briefly mention the applications of Personal Digital Assistant.
- c) What care should be taken by the cyber forensic investigator in the collection and preservation of data stored on hard drive?

(6+6+6)

4.

- a) Explain the Digital Forensic Laboratory Accreditation Standards Grading Criteria with the help of an example of Quality Assurance Checklist.
- b) Define cyber stalking. What is its significance in Cyber Forensic? Explain types of cyber stalking.

(9+9)

5.

- a) What is file carving? Explain Block-Based Carving and Statistical Carving in brief
- b) What is Hash function? Mention applications of hash functions related to cyber forensics.
- c) How to recover deleted file in Linux? Explain with the help of an example.

(6+6+6)

6.

- a) Define the following terms:
 - i) Data diddling
 - ii) Email bombing
 - iii) Denial of Service attack
 - iv) Logic bombs
- b) What is Session Hijacking? Explain the methods for session hijacking.
- c) Define privacy law. Classify types of privacy law. Explain information privacy law.

(4+9+5)

- **7.** Write Short notes on following:
- a) i2 Analyst's Notebook
- b) Forensic Toolkit
- c) Steganography

(6+6+6)