Sl. No.

CE1.3-R4 : CYBER FORENSIC AND 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**

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1. (a) Define Cyber Forensics.

    (b) How does Hash Function can be used for Cyber Investigation ?

    (c) Security and Encryption are two important features of NTFS. Briefly explain them.

    (d) What is Personal Digital Assistant ? Briefly mention the applications of Personal Digital Assistant.

    (e) What is MAC address ? Discuss its significance in Cyber Forensics.

    (f) How deleted files from the computer hard disk can be recovered ?

    (g) Define Privacy Law. Explain the types of Privacy Law in brief.

                                       (7x4)

2. (a) What is Cyber-Crime and how can you report it ? Explain in detail.

    (b) What is "Encase" tool kit ? How it can be used for Cyber Security ?

    (c) What are the advantages of Asymmetric Key Cryptography over Symmetric Key Cryptography ?

                                         (6+6+6)

3. (a) What are Hijacked Session Attacks ? Explain their role in cyber forensics.

    (b) In Cyber Forensics, what is the significance of Recycle Bin, Shortcut File and Print Spool File ?

    (c) An employee dissatisfied with the work environment in his corporate office, stoleconfidential client information from company's database with the intention of stealing the client and accelerate his own start up. As the CEO of the company, this incident has come into your notice. As an aware member of Company, what action will you take ?

                                         (6+6+6)

4. (a) Write down the Quality Standards for Digital Forensics in detail.

    (b) Explain the role of Cloaking in the data concealment.

    (c) What is File Carving ? Explain Statistical Carving and Block-based Carving.

                                         (6+6+6)

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5. (a) Write the commands to execute the following statements in Linux :

   (i) to recover the deleted partition

   (ii) to duplicate data in another partition

   (iii) to create the image of hard disk

   (b) Given many options, it is not easy to select the right tool that will fit your needs. Write down the aspects which should be considered while making the decision for selecting the right Digital Forensic Investigation Tools for Sys Admins. **(9+9)**

6. (a) Differentiate between Steganography and Cryptography. Discuss the importance of Stegnalysis in Computer Forensics.

   (b) Explain the terms : IP Spoofing and E-mail Spoofing. How can we defend our systems from Spoofing Attacks ? **(9+9)**

7. (a) Describe the various checklists that are to be used as per the standard operating procedures of Digital Forensic Laboratory.

   (b) What is Data Acquisition and Data Duplication in Cyber Forensics ? Explain in detail. **(9+9)**

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