

**INSTITUTE OF AERONAUTICAL ENGINEERING**

(Autonomous)

Dundigal-500043, Hyderabad

**B.Tech VII SEMESTER END EXAMINATIONS (REGULAR) - DECEMBER 2023**

Regulation: UG-20

**CYBER CRIME AND COMPUTER FORENSICS****Time: 3 Hours**

(COMMON TO AE | ME | CE)

**Max Marks: 70****Answer ALL questions in Module I and II****Answer ONE out of two questions in Modules III, IV and V****All Questions Carry Equal Marks****All parts of the question must be answered in one place only****MODULE – I**

1. (a) Outline the standard systems analysis steps to be applied when preparing for a forensic investigation. [BL: Understand| CO: 1|Marks: 7]
- (b) Point out the features of forensic duplication and investigation and also outline the problems and challenges that forensic examiners face when preparing and processing investigations, including the ideas and questions they must consider. [BL: Apply| CO: 1|Marks: 7]

**MODULE – II**

2. (a) Express why the evidence media be write protected? Decide the criminal and civil proceedings which can be used as computer forensics evidence. [BL: Understand| CO: 2|Marks: 7]
- (b) Summarize the general tasks investigators perform while working with digital evidence. Examine the processes involved in preparing for a search and also the seizing procedure for the digital evidence. [BL: Apply| CO: 2|Marks: 7]

**MODULE – III**

3. (a) What is digital evidence? State and explain general tasks that the investigators perform when working with digital evidence. [BL: Understand| CO: 3|Marks: 7]
- (b) Demonstrate the steps to be followed for identification of data, reconstructing past events of computer forensic analysis. [BL: Understand| CO: 3|Marks: 7]
4. (a) How to collect evidence in private sector incident scenes? Interpret the tactics of private companies in computer forensic analysis. [BL: Understand| CO: 4|Marks: 7]
- (b) To analyze e-mail evidence, an investigator must be knowledgeable about an e-mail server's internal operations. True or False? Justify your answer with suitable case study. [BL: Apply| CO: 4|Marks: 7]

**MODULE – IV**

5. (a) Categorize and explain the various surveillance tools used in information warfare. [BL: Understand| CO: 5|Marks: 7]
- (b) How can the hackers gain advantage in stealing essentials of investigation in forensics? Examine common website attacks that enable a hacker to deface a website. [BL: Apply| CO: 5|Marks: 7]

6. (a) Assess the avenues of prosecution and government efforts in information warfare. Write the first amendment of computer related crime. [BL: Understand| CO: 5|Marks: 7]
- (b) Show the types of field kit to be used in a crime scene. Illustrate how the processing of an incident will or a crime scene takes place in cyber forensics? [BL: Understand| CO: 5|Marks: 7]

### **MODULE – V**

7. (a) Build the methods for developing forensic capabilities in computer forensic cases. What is the impact of encryption on digital forensics? [BL: Understand| CO: 6|Marks: 7]
  - (b) Formulate the processing evidence and report preparation in computer forensic cases. [BL: Apply| CO: 6|Marks: 7]
8. (a) What are the key components of a cyber forensic lab? Outline the future issues of computer forensic cases. [BL: Understand| CO: 6|Marks: 7]
  - (b) Analyze whether password recovery is included in all the computer forensic tools or not? Interpret the tasks of a computer forensic examination protocol. [BL: Apply| CO: 6|Marks: 7]

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