


Name:			
Enrolment No:			
UPES End Semester Examination, December 2023			
Course: Digital Forensics I Program: B. Com. LL.B (Hons.) Course Code: CSSF3003		Semester: XI Time : 03 hrs. Max. Marks: 100	
Instructions:			
SECTION A (5Qx2M=10Marks)			
S. No.		Marks	CO
Q 1	What is Chain of Custody?	02	CO1
Q 2	Differentiate between Digital Forensics and Network Forensics?	02	CO2
Q 3	How does data encryption impact the process of digital forensics?	02	CO3
Q 4	Why is tracking network traffic a crucial aspect of network forensics?	02	CO2
Q 5	What is the importance of standard procedures in computer forensics investigations?	02	CO5
SECTION B (4Qx5M= 20 Marks)			
Q 6	What is Order of Volatility? How it is helpful in performing digital investigation.	05	CO2
Q 7	What is Windows Sysinternals? Explain TWO tools with their functionality that is present in Sysinternals.	05	CO1
Q 8	Briefly explain the role of the Information Technology Act in the legal aspects of digital forensics.	05	CO5
Q 9	Discuss the challenges and potential solutions in the recovery of erased and damaged data during a digital forensics investigation.	05	CO4
SECTION-C (2Qx10M=20 Marks)			
Q 10	Differentiate between the following: [5*2] a) FAT v/s NTFS file system structure b) IMAP v/s POP c) Volatile v/s Non-Volatile evidences d) Static IP v/s Dynamic IP e) TCP v/s UDP	10	CO4

Q 11	<p>Describe the steps involved in forensics investigation and evidence presentation. Discuss the challenges that may arise when presenting digital evidence in court.</p> <p style="text-align: center;">OR</p> <p>Walk through the process of disk imaging and preservation in computer forensics. Highlight the best practices and potential pitfalls to avoid during this procedure.</p>	10	CO3
<p>SECTION-D (2Qx25M=50 Marks)</p>			
Q 12	<p>Suppose you are asked to investigate a cyberbullying case involving a minor. A teenager is being harassed and threatened through various online channels.</p> <p>a) Describe how you would conduct this sensitive investigation while ensuring the emotional well-being of the victim. [10]</p> <p>b) Provide a detailed investigation plan, emphasizing the legal and ethical considerations you would address. [15]</p>	25	CO5
Q 13	<p>Imagine you are a digital forensics investigator assigned to a corporate data breach case. A company's sensitive customer data was stolen, and they suspect an insider.</p> <p>a) Describe how you would approach this investigation, including the steps you would take, the forensic techniques and tools you would use, and the potential challenges you might encounter. [10]</p> <p>b) Provide a detailed investigation plan. Also mention, which sections of IT Amendment Act (ITAA) will be covered in this investigation. [15]</p>	25	CO2