

(3 Hours)

Total Marks: 80

N.B.: (1) Question No.1 is compulsory.

(2) Attempt any three questions from the remaining five questions.

(3) Make suitable assumptions wherever necessary but justify your assumptions.

- Q.1 (a) What is Evidence? Explain the various types of digital evidence. 05  
 (b) Discuss the significance of ICCID, IMSI, MSISDN and LAI. 05  
 (c) What are the potential challenges or limitations associated with conducting Windows registry analysis? 05  
 (d) Define digital forensics and explain its goal in detail. 05
- Q.2 (a) What constitutes a computer security incident? What objectives are pursued through incident response? Elaborate on the concept of CSIRT. 10  
 (b) What are the challenges of acquiring Volatile Memory (Live Acquisition)? Give the tools used for Acquiring Volatile Memory. 10
- Q.3 (a) What are the potential risks involved in hard drive imaging during digital forensic investigations? Explain. 10  
 (b) How does Autopsy utilize advanced file carving techniques to recover deleted or fragmented files? 10
- Q.4 (a) Explain the process of conducting a static acquisition of digital evidence from a storage device. 10  
 (b) Explain in detail the process of reviewing pertinent logs in Unix systems investigation. 10
- Q.5 (a) How does forensic analysis of Microsoft Edge differ from other Web browsers, such as Google Chrome or Mozilla Firefox? 10  
 (b) What is GPS forensic? Explain the structure of the GPS device. Explain GPS Exchange Format (GPX). 10
- Q.6 (a) What is data carving, and how does it contribute to digital forensic investigations? 10  
 (b) Explain what SIM cards Forensics means. Explain the SIM architecture and file structure. Explain evidence extraction in SIM card forensics. 10
-