

Roll No: 

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**BTECH**  
**(SEM VI) THEORY EXAMINATION 2023-24**  
**CYBER FORENSIC ANALYTICS**

**TIME: 3 HRS****M.MARKS: 100**

**Note:** 1. Attempt all Sections. If require any missing data; then choose suitably.

**SECTION A****1. Attempt all questions in brief. **2 x 10 = 20****

Q no.	Question	Marks	CO
a.	What is cybercrime?	02	1
b.	What are some examples of criminal behavior in cyberspace?	02	1
c.	What is cyber forensics?	02	2
d.	What are some examples of digital devices that can be subject to forensic analysis?	02	2
e.	Can you explain the concept of network investigation?	02	3
f.	What is cyber investigation?	02	3
g.	What are pre-search activities in evidence management?	02	4
h.	What is digital evidence?	02	4
i.	What does electronic governance entail?	02	5
j.	What is the Information Technology Act 2000?	02	5

**SECTION B****2. Attempt any three of the following: **3 x 10 = 30****

a.	Discuss the challenges associated with jurisdictional concerns in prosecuting cybercriminals operating across borders?	10	1
b.	Describe the characteristics of digital devices and explain why they are subject to forensic analysis?	10	2
c.	Explain the process of network investigation, including the steps involved and the tools used to analyze network traffic?	10	3
d.	Discuss the importance of network evidence in cyber investigations, including logs, packet captures, and network configurations?	10	4
e.	Provide a practical guide to using digital signatures in compliance with the IT Act, including obtaining digital certificates and signing electronic documents?	10	5

**SECTION C****3. Attempt any one part of the following: **1 x 10 = 10****

a.	Explain the concept of eCash security and the measures taken to ensure the safety of electronic transactions?	10	1
b.	Explore various types of internet payment services and the vulnerabilities they may face to cyber threats?	10	1

**4. Attempt any one part of the following: **1 x 10 = 10****

a.	Explain the concept of data carving and how it is used to recover deleted or hidden files from storage devices?	10	2
b.	Discuss the role of steganography in cyber forensics and how it is used to conceal information within digital files?	10	2



**Roll No:**

**BTECH**  
**(SEM VI) THEORY EXAMINATION 2023-24**  
**CYBER FORENSIC ANALYTICS**

**TIME: 3 HRS**

**M.MARKS: 100**

**5. Attempt any *one* part of the following:**

$$1 \times 10 = 10$$

a.	Explain the principles of cyber criminal profiling and the techniques used to create offender profiles?	10	3
b.	Describe stylometric techniques used in cyber investigation for authorship attribution and linguistic analysis?	10	3

**6. Attempt any *one* part of the following:**

$$1 \times 10 = 10$$

a.	Discuss the importance of network evidence in cyber investigations, including logs, packet captures, and network configurations?	10	4
b.	Discuss the role of contextual information in evidence analysis and how it helps investigators understand the significance of collected evidence?	10	4

**7. Attempt any *one* part of the following:**

$$1 \times 10 = 10$$

a.	Analyze the impact of the IT Act on promoting digital transformation and innovation in various sectors of the economy, including e-commerce, finance, healthcare, and education?	10	5
b.	Explain the penalties and compensation measures outlined in the IT Act for contravention of its provisions, including unauthorized access, data theft, and cybercrimes?	10	5