



**II SEMESTER M.TECH. (COMPUTER SCIENCE AND INFORMATION SECURITY)
END SEMESTER REGULAR EXAMINATIONS, JULY 2022**

SUBJECT: CYBER FORENSICS [CSE 5014]

REVISED CREDIT SYSTEM

(01/07/2022)

TIME : 3 HOUR

MAX.MARKS : 50 M

Instructions to the Candidates

- Answer all **FIVE** full Questions.
- Missing data can be suitably assumed.

Q. No	Questions	M	CLO	Blooms Taxonomy Level
1.A	"Many types of criminal and civil proceedings can and do make use of evidence revealed by computer forensics specialists." Justify your answer.	4M	1	3
1.B.	Write the ultimate aim of forensic investigation is its use in legal proceedings.	2M	1	3
1.C	Illustrate the General Internet Security Principles and Architecture?	4M	1	3
2.A	Illustrate the Storage-centric model with neat sketch of computing with its benefits.	5M	1	3
2.B.	Illustrate the Low Earth Orbit (LEO) network with neat sketch.	2M	1	3
2.C	"Each participant in a computer forensics course who successfully completes the course should receive some sort of certificate of completion that is suitable for syllabus framing." Justify your answer.	3M	2	3
3.A	Do you think that email security has to be taken seriously? How much effort must be invested in encryption and securing email? State the requirements for email security and vulnerabilities, if any. Suggest the components required for email security and justify your answer.	3M	2	4
3.B	Do you think using a public Wi-fi is a crime? What are the risks associated with it.	3M	2	4
3.C	Categorize crimes according to their impact as high, medium, or low financial loss with justification for each.	4M	2	3

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|-----|---|----|---|---|
| 4.A | Analyze cryptocurrencies such as bitcoin, bitcoin cash, and Ethereum and the reasons for their price fluctuation in the market over a period of time. | 3M | 2 | 3 |
| 4.B | The trade secrets and sensitive information from a company were sold to a competing company. Employee X who is working in that company is suspected to have sold the information. Employee x claims that his system does not have any USB ports. Explain how such a suspicion was raised. How can it be proved that employee X was with the cybercrime? | 2M | 3 | 3 |
| 4.C | Illustrate the categories of cyber forensics tools. | 5M | 3 | 3 |
| 5.A | Imagine that you are on-site during a search warrant and suspect's computer is powered on and you observe one of the following icon's in the status bar (shown in Fig. 1). What could this imply and what actions would you take as a result of your observation while on screen. | 3M | 3 | 3 |



Fig. 1 Icon on Computer

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|-----|---|----|---|---|
| 5.B | With neat sketch, write the Stages in investigation of digital evidence. | 2M | 4 | 3 |
| 5.C | a) Mr Arun, the owner of a software company, preferred a complaint that, the source code under development had been misused by an ex-employee. Mr Arun had obtained copyright for the code under development. Elucidate on the investigation process, evidence to be gathered, analysis, and the applicable sections of the law.
b) Illustrate the three categories of cybercrime. | 5M | 4 | 4 |

-ALL THE BEST-