

Total number of printed pages-4

44 (4) BCA-HG-4026

2023

INFORMATION SECURITY AND CYBER LAWS

Paper : BCA-HG-4026

Full Marks : 80

Time : Three hours

**The figures in the margin indicate
full marks for the questions.**

1. Answer the following questions : $1 \times 12 = 12$

(a) Which program uses port number 53?

~~(b)~~ Define software piracy.

~~(c)~~ Data encryption is primarily used to ensure confidentiality.

(State ~~True~~ or False)

~~(d)~~ Define steganography.

~~(e)~~ Which software is mainly used to help users detect viruses and avoid them?

~~(f)~~ What do you mean by Malware?

Contd.

(g) What is the legal form of hacking?

(h) Which of the following term denotes the protection of data from modification by unknown user?

(i) Confidentiality

~~(ii) Authentication~~

(iii) Integrity

(iv) Non-repudiation

(i) What is digital signature?

~~(j)~~ What are cyber world and cyber law?

~~(k)~~ Define Firewalls.

~~(l)~~ What is Information system?

2. Mention the relevant section with their penal provision in relation to different cyber offences : $1 \times 8 = 8$

(a) Penalty for damage to computer. section 43

(b) Punishment for cheating by personating ~~etc~~ by using computer resources.

(c) Punishment for identity theft. C

(d) Punishment for cyber terrorism.

- (e) Punishment for disclosure of information in breach of lawful contract.
- (f) Punishment for sending offensive messages through communication service etc. A
- (g) Tampering with computer source document. 68 A
- (h) Punishment for publishing or transmitting obscene material in electronic form. 67A

3. Differentiate the following : $3 \times 5 = 15$

- (a) Authentication and authorization
- (b) Threats and attacks
- (c) Hardware and software vulnerabilities
- (d) Ping scan and vanilla scan
- (e) Scanning and sniffing

4. Describe Risk Management. List the components of Risk Management. 5

5. Decrypt the following Cipher text to Plain text using Rail Fence Cipher technique : (key = 3)

a d i c e v i d g t l r m o i a i

5

6. Define data security. State the importance of data security. 5

7. Answer the following questions : $5 \times 2 = 10$

(a) Discuss the role of logging and intrusion detection system.

(b) Write a brief overview of digital crime.

8. (a) What are the differences between Hacking and Cracking? 5

(b) Define spoofing. Explain *any three* types of spoofing. 5

9. What is a port scan? What are the uses of port number 20, 22 and 80? Explain *any three* port scanning techniques. $1 + 3 + 6 = 10$

Or

Write short notes on : **(any two)** $5 \times 2 = 10$

(a) Malicious software

(b) Caesar Cipher technique

(c) Digital signature

(d) Private key cryptography

(e) Computer forensic