PAPER ID-410031

Roll No:

B. TECH.
(SEM V) THEORY EXAMINATION 2021-22
CYBER SECURITY

Time: 3 Hours   *Total Marks: 70*

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

SECTION A

1. **Attempt *all* questions in brief.**   **2 x 7 = 14**
    a.   What are the threats to Information system?
    b.   What is the need of information security?
    c.   What are the security threats to E-commerce?
    d.   What are the security issues in hardware?
    e.   Explain Firewall in brief.
    f.   Explain Copyright Act in brief.
    g.   What are Email security policies?

SECTION B

2. **Attempt any *three* of the following:**   **7 x 3 = 21**
    a.   What do you mean by Virtual Private Network (VPN)? Discuss authentication mechanism used in VPN.
    b.   What is the security architecture of Information system? Explain the secure system design of Information system.
    c.   How can we provide the physical security of IT assets?
    d.   Explain public key and private key cryptography with the help of diagram.
    e.   Explain Intellectual Property Rights and Copyright Act in detail.

SECTION C

3. **Attempt any *one* part of the following:**   **7 x 1 = 7**
    (a)   What is the Information system? Discuss the different types of Information system.
    (b)   Explain Confidentiality, Integrity and Availability in terms of cyber security.

4. **Attempt any *one* part of the following:**   **7 x 1 = 7**
    (a)   Explain the e-Cash and Credit/Debit Cards with respect to E-commerce.
    (b)   What is Intrusion Detection System? Explain with Block Diagram.

5. **Attempt any *one* part of the following:**   **7 x 1 = 7**
    (a)   What is the need of Risk management? What are the processes involve to managing the risk during the development of information system.
    (b)   What are the data security considerations? Explain Data backup security, data archival security in this reference.

6. **Attempt any *one* part of the following:**   **7 x 1 = 7**
    (a)   Explain the various types of security policies and their review process.
    (b)   Discuss different types of ISO standard related to information security.

7. **Attempt any *one* part of the following:**   **7 x 1 = 7**
    (a)   Explain Software License and Semiconductor Law in detail.
    (b)   Explain Cyber laws in India in detail.