B.TECH.
(SEM III) THEORY EXAMINATION 2022-23
CYBER SECURITY

Time: 3 Hours   *Total 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**

a)   What do understand by Information System?
b)   Define Information Assurance.
c)   Explain Intrusion Detection System.
d)   Define
           (i)   Trojan Horse
           (ii)   Virus
e)   What is Digital Signature.
f)   What are Security Issues in Hardware.
g)   Explain Copyright Law in India.
h)   Explain Semiconductor Law and Patent Law.
i)   What are WWW Policies.
j)   What are threats to E-Commerce.

SECTION B

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

a)   What is cyber security? How to secure the cyber using Security Risk Analysis?
        Also discuss the common terminology that comes out from the process of the
        security risk analysis.
b)   Explain any 6 security threats.
c)   How can data be secured. What are the steps crucial for backup security measures.
d)   Explain:
               i) IT Act
               ii) Software License
               iii) ISO
               iv) Information Technology Act, 2000
e)   Explain E-Cash. How is it useful in public domain?

SECTION C

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

a)   What is the information system? Discuss the various types of information
        system.
b)   What is information security? Explain the need for Information security.

4. **Attempt any *one* part of the following:** 10x1=10

a) Explain Smart Card. Explain how Credit Card is different from Debit Card.

b) What is Data Security? Explain various methods used to secure data in computers and Networks.

5. **Attempt any *one* part of the following:** 10x1=10

a) Define the followings
   (i) CCTV
   (ii) Firewall
   (iii)E-mail Viruses

b) How can Secure Information Systems be developed. Explain in detail.

6. **Attempt any *one* part of the following:** 10x1=10

a) What is Security Policy? Why it is necessary? Explain some Corporate policies

b) What is the Intellectual Property Right? Explain the various types of Intellectual Property Right.

7. **Attempt any *one* part of the following:** 10x1=10

a) What is the need of security technology? Discuss various types of firewall security technologies.

b) What is the need of Risk Management? What are the processes involved to managing the risk during the development of secure information systems?