# BTICS501

## V Semester Examination, December - 2022

### B.Tech. (CSE-ICS)

# Network Security and Cryptography

Choice Based Credit System (CBCS)

**Time: 3 Hrs.**

**Maximum Marks: 60**
**Minimum Pass Marks: 24**

*Note:* All questions carry equal marks, out of which part'A' and 'B' carry 3 marks and part 'C' carries 6 marks. From each question, part 'A' and 'B' are compulsory and part 'C' has internal choice.
Draw neat diagram, wherever necessary.
Assume suitable data wherever necessary.

| | | |
|---|---|---|
| **Q.1(A)** | Explain need of Security arises? | 03 |
| **(B)** | Enlist different Threats in networks. | 03 |
| **(C)** | Explain Network Security Controls –Architecture. | 06 |

**OR**

Explain working of Honey pots.

| | | |
|---|---|---|
| **Q.2(A)** | What are various Password Cracking Techniques? | 03 |
| **(B)** | Enlist categories and types of firewall. | 03 |
| **(C)** | Describe working of Proxy Servers and Anonymizers. | 06 |

**OR**

Why Firewall is required?

| | | |
|---|---|---|
| **Q.3(A)** | Write about Symmetric Key Cryptography. | 03 |
| **(B)** | What is DES (Data Encryption Standard) algorithm? | 03 |
| **(C)** | How does Triple DES work? | 06 |

**OR**

Why IDEA (International Data Encryption Algorithm) algorithm is needed?

| | | |
|---|---|---|
| **Q.4(A)** | What do you mean by Asymmetric key Cryptography? | 03 |
| **(B)** | Why Diffie-Hellman Key Exchange is required? | 03 |
| **(C)** | How does RSA algorithm work? | 06 |

**OR**

How to protect from Man in Middle Attack?

*Contd...*

**Q.5(A)** Explain SSL protocol.                                              03

    **(B)** How does Authentication Token concept work?                     03

    **(C)** Write about Pretty Good Privacy.                               06

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**OR**

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    Why Certificate based Authentication is required?

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