

**First Semester M. Tech (CNE) Examination, January 2014
(Autonomous Scheme)**

Information Security

Time: 3 Hrs

Max. Marks: 100

Note: Answer any FOUR questions, two each from Part- A and Part-B. Part - C is compulsory.

- | | | |
|------|---|----|
| 1.a) | Discuss the critical characteristics of information. | 10 |
| b) | Explain key security Architectural components. | 10 |
| 2.a) | Discuss the firewall categorized by Architecture. | 10 |
| b) | Discuss the scanning and analysis tools. | 10 |
| 3.a) | Explain five areas of network management model and operation. | 10 |
| b) | Discuss the security mechanism defined by x 800. | 10 |

Part - B

- | | | |
|------|--|----|
| 4.a) | Explain cipher block mode of operations. | 10 |
| b) | What is message authentication code? How it is implemented using one way Hash function? | 10 |
| 5.a) | What are key rings? Discuss the usefulness of key rings in message generation and message reception. | 10 |
| b) | What are the benefits and apps of IP Sec? | 10 |
| 6.a) | Explain SSL architecture and SSL record protocol. | 10 |
| b) | Discuss differences between version 4 and 5 of Kerberos. | 10 |

Part - C

- | | | |
|----|---|---|
| 7. | Answer the following: | |
| a) | Expand CIO and CISO. | 2 |
| b) | What is security perimeter? | 1 |
| c) | What is security Blue Print? | 1 |
| d) | What is content filtering and reverse fire-wall? | 2 |
| 8. | | |
| a) | What are the different types of IDS? | 2 |
| b) | What are the different types of active attacks? | 2 |
| c) | What is chosen plain text attack? | 2 |
| d) | What are the different authentication procedure? | 2 |
| 9. | | |
| a) | What are the functions provided by S/MIME? | 2 |
| b) | What are the steps of SSL Handshake Protocol? | 2 |
| c) | What is canonical form in S/MIME? | 1 |
| d) | What are the contents of authorization Request message? | 1 |