



Code No: 824AE

**R15****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA IV Semester Examinations, June/July - 2018****INFORMATION SECURITY****Time: 3hrs****Max.Marks:75****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

**PART - A****5 × 5 Marks = 25**

- 1.a) What are the characteristics of Information? [5]
- b) Define Stream Ciphers. [5]
- c) What do you mean Biometric Authentication? [5]
- d) What is IP Security? [5]
- e) Define Firewall. [5]

**PART - B****5 × 10 Marks = 50**

2. Explain in detail about Steganography. [10]
- OR**
3. Describe the need for Security. [10]
4. Discuss the AES Algorithm. [10]
- OR**
5. Explain Diffie-Hellman key exchange algorithm with an example. Also explain attack on Diffie-Hellman key exchange. [10]
6. Write in detail about Knapsack Algorithm. [10]
- OR**
7. What is Message Digest? Explain HMAC algorithm. [10]
8. How Does S/MIME Work? Explain in detail. [10]
- OR**
9. Write a note on IP Security protocols for security. [10]
10. Explain in detail about Secure Electronic Transaction (SET). [10]
- OR**
11. What are different services provided by the SSL Record Protocol? [10]

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