



Code No: A4007

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M.Tech I Semester Examinations, March/April 2011

NETWORK SECURITY & CRYPTOGRAPHY

(INFORMATION TECHNOLOGY)

Time: 3hours

Max.Marks:60

**Answer any five questions
All questions carry equal marks**

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- 1.a. Explain the model for network security
- b. What is the difference between a mono alphabetic cipher and poly alphabetic cipher? [12]
- 2.a. Write an algorithm of Triple DES
- b. What are the characteristics of Advanced Symmetric block cipher? [12]
- 3.a. Explain about the Chinese remainder theorem.
- b. Describe how the hash function value is generated in hash function. [12]
- 4.a. Explain how authentication is provided by PGP.
- b. Explain about the message digest algorithm. [12]
5. Describe the various types of viruses. [12]
6. a. Describe about the Elliptic curve cryptography.
- b. Explain the principles of Block cipher. [12]
- 7.a. Explain about the Fermat's algorithm.
- b. Describe about the standards of digital signature. [12]
- 8.a. What are the requirements of Web Security?
- b. List and briefly explain the passive and active security threats. [12]
