B. Tech. DEGREE EXAMINATION, MAY - 2015

(Examination at the end of Final Year)

COMPUTER SCIENCE

Paper - V : Cryptography and Network Security

Time : 3 Hours   **Maximum Marks : 75**

Answer question No. 1 compulsory   *(15)*

Answer ONE question from each unit   *(4 x 15 = 60)*

1)   Write a short notes on :

   a)   Define cryptography.

   b)   Define fermat's theorem.

   c)   Define virus.

   d)   What is the need of Authentication Header.

   e)   Define trusted system.

Unit - I

2) a)   Explain steganography.

   b)   Explain block cipher modes of operation.

                              OR

   a)   Explain different transposition techniques.

   b)   Explain strength of DES.

Unit – II

3)   Explain the Secure Hash Algorithm with a neat block diagram.

                              OR

   a)   Explain Authentication requirements and functions.

   b)   Explain Euclid algorithm.

Unit – III

4) a) Explain Authentication Header.

   b) Explain Applications of IP Security.

<div align="center">OR</div>

   a) Explain X.509 authentication service.

   b) Discuss virus counter measures.

Unit – IV

5) a) Explain secure electronic Transaction.

   b) Give the Principle of Firewall Design.

<div align="center">OR</div>

   a) Discuss Password Management

   b) Explain web security considerations.

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