

Reg. No.:
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# Question Paper Code: 21513

# B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2013.

#### Seventh Semester

# Computer Science and Engineering

## IT 2352/IT 62/10144 IT 603 – CRYPTOGRAPHY AND NETWORK SECURITY

(Common to Information Technology – Sixth Semester)

(Regulation 2008 / 2010)

Time: Three hours

Maximum: 100 marks

## Answer ALL questions.

#### PART A — $(10 \times 2 = 20 \text{ marks})$

- 1. Convert the given text "anna university" into cipher text using rail fence technique.
- 2. Define steganography.
- 3. What is the disadvantages with ECB mode of operation?
- 4. Find GCD (21,300) using Euclid's algorthim.
- 5. Define discrete logarithm.
- 6. What is weak collision resistance? What is the use of it?
- 7. List out the services provided by PGP.
- 8. Expand and define SPI.
- 9. Mention the two levels of hackers.
- 10. What is logic bomb?

# PART B -- (5 $\times$ 16 = 80 marks)

11. (a) Write about any two classical crypto systems (substitution and transposition) with suitable examples.

Or

- (b) Write about Fermat and Euler's theoram in detail.
- 12. (a) Explain briefly about DES in detail.

Or

- (b) Explain about RSA with one suitable example.
- 13. (a) Explain about secure hash algorithm (SHA) in detail.

Or

- (b) Explain about Diffie Hellman Key exchange algorithm with one suitable example.
- 14. (a) Discuss about X.509 authentication service in detail.

Or

- (b) Explain about S/MIME in detail.
- 15. (a) Write about virus and related threats in detail.

Or

(b) Explain briefly about trusted system.