

## FACULTY OF ENGINEERING

B.E. 4/4 (CSE) I – Semester (Supplementary) Examination, July 2012

Subject : **Information Security** (Elective – I)

Time : 3 hours

Max. Marks : 75

**Note:** Answer all questions from Part–A and answer any **FIVE** questions from Part–B.

### PART – A (25 Marks)

1. What are the six layers of security an organization must have in place to protect its operations?
2. Differentiate between a virus and a worm.
3. Write briefly about how policies, standards and practices are related to each other.
4. What is benchmarking?
5. What is a proxy server?
6. Name a few systems that provide protection to remote/dialup connections.
7. What is a honey pot?
8. Differentiate between a stream cipher and a block cipher.
9. What is a digital signature?
10. What is Foot Printing?

### PART – B (50 Marks)

11. List and discuss all the critical characteristics of information from the security point of view.
12. Discuss in detail the different categories of threats that exist for an information system.
- 13.a) Describe the different fire wall architectures.  
b) Write briefly about the various types of Intrusion Detection Systems.
- 14.a) What are the criteria used to carry out information asset valuation? discuss.  
b) Write briefly about risk assessment and access controls.
15. Describe the Digital Encryption standard scheme in detail.
16. Describe the working of the MD5 algorithm in detail.
- 17.a) Describe the components of an SET system.  
b) Explain how the Dual Signature of the Set protocol works.