

FACULTY OF ENGINEERING

B.E. 4/4 (CSE) I-Semester (**Supplementary**) Examination, June / July 2011

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 different classes of data users?
2. What is a spoofing attack?
3. What is due care?
4. What is risk appetite?
5. How does a packet filtering firewall work?
6. What is Foot printing?
7. What is the difference between symmetric and asymmetric crypto algorithms?
8. How can we guarantee secrecy and authentication in public key crypto systems?
9. What are desirable characteristics of a hash function?
10. What are different components of SSL protocol stack?

PART - B (50 Marks)

11. Discuss in detail the different important characteristics of information from the information security point of view.
12. List out and discuss in detail the different types of threats that exist for an information system.
13. What are the different types of Intrusion Detection Systems that you can use in the design of an information security system? Discuss in depth.
14. Discuss the following aspects of contingency planning :
 - a) Incident response
 - b) Disaster recovery
 - c) Business continuity
15. Describe in detail how the RSA algorithm works. Also discuss its different applications.
16. Describe the working principle of the SHA-1 algorithm in detail.
17. What is the main motivation behind the proposal of the SET protocol? Describe the protocol in detail.