

FACULTY OF INFORMATICS

B.E. 4/4 (IT) I-Semester (Main) Examination, November / December 2012

**Subject : Information Security
(Elective-III)**

Time : 3 Hours

Max. Marks: 75

Note: Answer all questions of Part - A and answer any five questions from Part-B.

PART – A (25 Marks)

1. Write about the information characteristics integrity and confidentiality. (3)
2. What is a Threat? List the different threat groups? (2)
3. How is Risk management integrated into Sec SDLC? (2)
4. List the three general categories of unethical and illegal behaviour. (3)
5. Define a standard. (2)
6. State the purpose of a content filter. (2)
7. What is Public Key Cryptography? (3)
8. Comment on the strengths and weakness of DES. (3)
9. Formulate the requirements for a digital signature. (3)
10. Draw SSL Protocol Stack. (2)

PART – B (5x10=50 Marks)

11. What is an Attack? Discuss about any six listed attacks. (10)
- 12.(a) Justify the need for Data classification. Write about classification and management of data. (6)
(b) How is risk management done? (4)
13. Explain how Scanners and analysis tools assists security and Network Administrators in handling attacks. (10)
14. Discuss AES algorithm in detail. Mention the features of AES that are different from other symmetric key based encryption algorithms. (10)
15. In detail explain the process involved in generating a 160 bit message digest using SHA-1 algorithm. (10)
- 16.(a) How are firewalls used to protect a network against threats? (5)
(b) Give the overview of SET. (5)
- 17.(a) Write about the five components of an Information System. (5)
(b) List the ten commandments of computer Ethics. (5)
