Subject Code: H4002/R13

M. Tech -II Semester Regular/ Supply Examinations, October, 2015 INFORMATION SECURITY

(Common to IT, CS, CS&T and CS&E)

Time: 3 Hours Max Marks: 60

Answer any FIVE questions All questions carry EQUAL marks

- 1. a. What is security mechanism? Briefly describe the relation between security services and mechanisms.
 - b. Briefly describe a model for network security with the help of a neat diagram.
- 2. a. What are format string vulnerabilities? How they can be fixed and exploited.
 - b. Briefly describe route table modification.
- 3. a. What is a symmetric encryption? Briefly describe the rules for secure use of symmetric encryption.
 - b. Briefly describe HMAC.
- 4. a. Briefly describe the location of encryption devices.
 - b. Compare and contrast the different conventional encryption algorithms.
- 5. a. Briefly describe about digital certificates and public key distribution of secret keys
 - b. What are the design goals of Kerberos?
- 6. a. Describe in detail about combining security associations
 - b. Briefly describe the applications of IPSec.
- 7. a. Briefly describe the involved steps in the SSL record protocol transmission
 - b. Briefly describe the components of SET system.
- 8. a. Briefly describe the characteristics of firewalls
 - b. What is SNMP? List the categories of SNMP.
