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Eighth Semester B.E. Degree Examination, December 2010
Information and Network Security

Time: 3 hrs.

Max. Marks:100

Note: *Answer any FIVE full questions, selecting*
at least TWO questions from each part.

PART – A

1   a. Discuss the system specific security policy. How managerial guidance and technical specifications can be used in SysSP? **(10 Marks)**
    b. Who is responsible for a policy management? How a policy is managed? Explain. **(10 Marks)**

2   a. Explain the major steps specified in BS7799:2 document. How these steps help in security planning? **(10 Marks)**
    b. What is a firewall? Show the working of a screened host and dual homed firewalls. **(10 Marks)**

3   a. How a firewall can be configured and managed? Give examples. **(10 Marks)**
    b. What is a VPN? Explain the two modes of a VPN. **(10 Marks)**

4   a. What is an intrusion? Briefly write about any eight IDPS terminologies. **(10 Marks)**
    b. What is an encryption? Discuss the symmetric and asymmetric encryption methods. **(10 Marks)**

PART – B

5   a. What is meant by information security? Discuss the three aspects of information security. **(10 Marks)**
    b. Briefly explain the four types of security attacks that are normally encountered. Also, distinguish between active and passive attacks. **(10 Marks)**

6   a. With a schematic figure, explain Kerberos Ver-4 authentication dialogue. Clearly mention various steps. **(10 Marks)**
    b. With flow charts, explain the process of transmission and reception of PGP messages. **(10 Marks)**

7   a. Give the general structure of IPSEC authentication header. Describe how anti reply service is supported. **(10 Marks)**
    b. With neat diagrams, discuss the basic combinations of security associations. **(10 Marks)**

8   a. What is SET? Discuss the requirements and key features of SET. **(10 Marks)**
    b. Write short notes on:
        i)   SSL handshake protocol
        ii) SSL alert protocol. **(10 Marks)**

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