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Question Paper Code : 71749

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2015.

Eighth Semester

Computer Science and Engineering

IT 2042/IT 706/10144 CSE 58/10177 ITE 33 — INFORMATION SECURITY

(Common to Seventh Semester Information Technology)

(Regulation 2008/2010)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define Information Security.

2. What is e-mail spoofing?

3. What are the threats to information security?

4. What is intellectual property?

5. What are vulnerabilities? How do you identify them?

6. What is risk mitigation?

7. What is the difference between an ACL and a configuration rule?

8. What is contingency planning?

9. What is content filter?

10. What is the difference between digital signatures and digital certificates?

PART B — (5 × 16 = 80 marks)

11. (a) Identify the five components of an information system. Which are most directly affected by the study of computer security? Which are most commonly associated with its study?

Or

(b) Explain the components of Systems Development Life Cycle (SDLC) with a neat sketch.

12. (a) (i) Explain the four important functions of information security in an organization. (8)

(ii) Explain the ethical concepts in information security. (8)

Or

(b) (i) Discuss the different kinds of threats to an information security. (8)

(ii) Describe the major types of attacks in detail. (8)

13. (a) Discuss about various risk control strategies adopted by an organizational management to ensure security of information.

Or

(b) (i) Explain the risk identification process in detail. (8)

(ii) Discuss the risk assessment in detail. (8)

14. (a) Explain the security architecture design process with a neat sketch.

Or

(b) Explain the enterprise information security policy and issue specific security policy.

15. (a) Explain the various types of intrusion detection systems.

Or

(b) (i) Discuss the roles and responsibilities of information security staff. (8)

(ii) Discuss the generations of firewall in detail. (8)