Register Number: ……………………..

B.E DEGREE EXAMINATIONS: APRIL/MAY 2014

(Regulation 2009)

Sixth Semester

COMPUTER SCIENCE AND ENGINEERING

ITY122 : Information Security

Time: Three Hours   **Maximum Marks: 100**

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. Which was the first OS created with security as its primary goal?

   a) WINDOWS   b) ARPANET

   c) MULTICS   d) UNIX

2. Making sure that data has not been changed unintentionally is called ---------------

   a) risk   b) exposure

   c) vulnerability   d) integrity

3. An attempt to slow down or stop a computer system by flooding the system with requests for information is called--------------

   a) virus   b) Trojan horse

   c) denial-of-service attack   d) worm

4. A weakness in a system that may be exploited is called ----------------

   a) vulnerability   b) risk

   c) exposure   d) threat

5. Which of the following is not an asset attribute?

   a) IP address   b) serial number

   c) backup procedure   d) element type

6. The process of determining relative risk for each of the vulnerabilities is called -----------

   a) risk management   b) security

   c) risk assessment   d) risk control

7. The point at which an organization's security protection ends, and the outside world begins is referred to as

   a) risk control   b) security perimeter

   c) security plan   d) exposure

8. Which testing strategy is not used in Incident response plan?

   a) serial   b) checklist

   c) parallel   d) simulation

9. In asymmetric key cryptography ------ keys are required per user.

   a) 3   b) 4

   c) 2   d) 5

10. The transfer of live transactions to an off-shelf facility is called -----------

    a) Ignorance   b) remote journaling

    c) exposure   d) transmission

PART B (10 x 2 = 20 Marks)

11. List the components of information system.

12. What is SDLC?

13. Give the need for security.

14. List any 4 professional issues associated with security.

15. What is the goal of documenting results of risk assessment?

16. List the questions that can assist in developing the criteria for asset valuation.

17. List the management controls of NIST SP 800-26.

18. What is the importance of blueprint?

19. What do you mean by physical security?

20. What are the advantages and disadvantages of using honey pots?

PART C (5 x 14 = 70 Marks)

21. a) (i) Discuss about the critical characteristics of information. (7)

       (ii) Build the NSTISSC security model and explain its components. (7)

(OR)

   b) Explain the characteristic features of security SDLC.

22. a) Summarize on the possible threats affecting security aspects.

(OR)

   b) Elaborate on the different types of attacks over information systems.

23. a) Discuss in detail the process of assessing and controlling risk management issues.

(OR)

b)   What is risk Management? State the methods of identifying and assessing risk management.

24. a)   Elaborate on the functionalities of VISA international security model. Also state the pros and cons of using the model.

(OR)

b)   Explain about the design of security architecture with relevant diagrams.

25. a)   Illustrate the working of scanning and analysis tools.

(OR)

b) (i)   Propose any 4 access control devices and explain their functions.   (7)

      (ii)   Identify the requirements of personnel to be recruited for security jobs.   (7)

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