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Question Paper Code: 92041

M.E. DEGREE EXAMINATION, DECEMBER 2013.

Elective

Computer Science and Engineering (with Specialization in Networks)

01PNE501 - INFORMATION SYSTEMS SECURITY

(Regulation 2013)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions.

PART A - (10 x 2 = 20 Marks)

- 1. What are common security breaches?
- 2. What is confidentiality?
- 3. List the types of cryptanalytic attacks.
- 4. State the difference between session key and master key.
- 5. What is the purpose of access control mechanisms?
- 6. What are the uses of identity in a system?
- 7. What is malicious code?
- 8. Define intruder.
- 9. Define Security.
- 10. List down the difference between system security and program security.

PART - B (5 x
$$14 = 70$$
 Marks)

11. (a) What is a Policy? How it is different from law? Describe security policies in detail. (14)

Or

(b) Briefly explain the need of computer security and its access control mechanism.

(14)

12. (a) Explain briefly about the cryptographic functions available. How it is useful to our real world?. (14)

Or

- (b) Briefly explain the cryptographic key infrastructure. (14)
- 13. (a) How an Identity is useful to the system? Briefly explain. (14)

Or

- (b) Briefly explain about the information flow and confinement problem. (14)
- 14. (a) What are the different ways to detect an instruction?. Explain in detail. (14)

Or

- (b) Briefly explain the various types of vulnerability. (14)
- 15. (a) Briefly explain the firewall types and advantages of each. (14)

Or

(b) Describe in detail about the need of program security and user security. (14)

PART - C
$$(1 \times 10 = 10 \text{ Marks})$$

16. (a) How key generation and exchange are happening in the public channel?. Discuss in detail. (10)

Or

(b) What are the different types of cipher techniques available? With example discuss any two in detail. (10)