

BE CO (REV)

Sem VII

SS.

QP Code :15608

(3 Hours)

[Total Marks : 100]

- N.B. : (1) Question 1 is compulsory.
(2) Attempt any four out of remaining six questions.
(3) Assumptions made should be clearly stated.
(4) Assume suitable data whenever required but justify the same.

- 1 (a) What is Multilateral Security? 5
(b) Compare Stream and Block encryption algorithms. 5
(c) Distinguish between attack, vulnerability and access control. 5
(d) What is Buffer overflow and incomplete mediation in Software Security? 5
- 2 The following questions are based on scenario in which encrypted data are passed between Alice and Bob using RSA algorithm. Alice's public key is { 17, 23 } and Bob's public key is { 5, 23 } Assume that no one knows the private keys but the original owners. 20
(a) Encrypt the message $M=7$ using Bob's public key.
(b) What should Alice have to do to decrypt the message from Q-2 a?
(c) What would Bob have to do to decrypt the message from Q-2 a?
(d) What is Alice's private key?
(e) What is Bob's private key?
3. (a) Explain how threat precursors are used for Reconnaissance of network. 10
(b) Upon reception of a digital certificate, how one can decide whether to trust that or not. 10
4. (a) Explain Physiological and Behavioral biometric techniques with example. 10
(b) Write short note on Access control List (ACL) and Capabilities. 10
5. (a) What is a firewall? Explain different types of firewall. 10
(b) Explain various types of port scan. 10
6. (a) What is spoofing? Explain ARP spoofing. 5
(b) What is SQL Injection? Give Example. 5
(c) Compare packet sniffing and packet spoofing. Explain the session hijacking attack. 10
7. Write short note on (Any Two) 20
(a) Compare AES and DES
(b) Explain different Security Mechanisms.
(c) Various ways for Memory and Address Protection
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