

M.E. Second Semester (Computer Science & Information Technology) (New - CGS)
13191 : Information Technology & Security : 2 RNME 3

P. Pages : 2

Time : Three Hours



AU - 3439

Max. Marks : 80

- Notes :
1. Due credit will be given to neatness and adequate dimensions.
 2. Assume suitable data wherever necessary.
 3. Illustrate your answer necessary with the help of neat sketches.
 4. Use of pen Blue/Black ink/refill only for writing the answer book.

1. a) Explain the working of quantum cryptography along with its applications. 7
- b) Explain the Simons decision principles use in construction and verification of cryptographic protocol. 7

OR

2. a) List & explain the generic weakness of the Merkle-Damgard design of hash function. 7
- b) State & explain "Needham-Schroeder" public key based authentication protocol. 7
3. a) Explain how 'encryption 3G' works in mobile security. 6
- b) State & explain the 'Public key Distribution' problem along with working of public key certificates. 7

OR

4. a) Explain PKD problem with example. 6
- b) State & explain the security requirement in secure software Engineering. 7
5. a) What are the different phases of digital investigation process. 6
- b) What is Risk Governance? What are the criteria for evaluating the risk governance. 7

OR

6. a) Explain the various social Engineering techniques. 6
- b) What are the various methods used in "Internet Foot-Printing". 7
7. a) Explain the working of 'sniffers' on the network & explain the working of 'TCP dump'. 7
- b) Explain the working of 7
 - i) Nessus
 - ii) Strobe.

OR

8. a) Explain the various types of 'spoofing'. 7
b) Explain the working of following password crackers. 7
i) Coin & Abel.
ii) John & Ripper.

9. a) Explain – how 'Session Hijacking with packet blocking is achieved. 6
b) Explain working of Firewall & state its limitations. 7

OR

10. a) State & explain various types of DOS attacks. 6
b) Explain the following- 7
i) Stack overflow ii) Heap overflow

11. a) Explain the role of IMAP & its vulnerabilities. 7
b) Why web is vulnerable? What are the various 'web-server' vulnerabilities. 6

OR

12. a) What are the various vulnerabilities in 'windows 2000'. 7
b) State & explain the various types of 'Incidents'. 6
