

B.E.(Computer Engineering) Semester Seventh (C.B.S.)
Information Assurance & Network Security

P. Pages : 2

Time : Three Hours



KNT/KW/16/7511

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No. 2.
 3. Solve Question 3 OR Questions No. 4.
 4. Solve Question 5 OR Questions No. 6.
 5. Solve Question 7 OR Questions No. 8.
 6. Solve Question 9 OR Questions No. 10.
 7. Solve Question 11 OR Questions No. 12.
 8. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) Explain different types of attacks. 7
- b) What are different Cipher techniques ? Explain any one with example. 7

OR

2. Explain the following terms in brief.
 - i) Chinese remainder theorem. 5
 - ii) Euclid's algorithm. 5
 - iii) Secret splitting & sharing. 4
3. a) Explain DES algorithm in detail. 9
- b) Define differential and linear cryptanalysis. 4

OR

4. a) Explain RSA algorithm in detail using $p = 3$, $q = 11$, $e = 7$, $M = 5$ calculate the cypher text. 8
- b) Explain SHA-1 algorithm. 5
5. a) Discuss in brief digital certificate with example. 7
- b) Explain different approaches of public key distribution. 7

OR

6. a) Describe about X.509 Authentication service in detail. 8
- b) Explain Deffie-Hellman key exchange algorithms steps in short. 6
7. a) Explain Internet key exchange (IKE) protocol in detail. 6

b) Discuss about anomaly based intrusion detection system. 7

OR

8. a) Explain in detail SSL handshake protocol. 6

b) Discuss about network based detection system. 7

9. a) What are different firewall design principals ? 6

b) Explain different types of viruses. 7

OR

10. a) Explain about chip-card transactions and attacks. 8

b) Discuss the password management system. 5

11. a) Explain online investigation tools used in cyber crimes. 6

b) What is computer forensics ? Explain the use of computer forensics in law enforcement. 7

OR

12. Write short note on **any three**. 13

a) Internet fraud.

b) Cyber Stalking.

c) Cyber terrorism.

d) Indian IT laws.
