NagpurStudents

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IT'S HARD TO BEAT A PERSON WHO NEVER GIVES UP.

Babe Ruth, American professional baseball player

B.E. Eighth Semester (Computer Science Engineering) (C.B.S.)
Information & Cyber Security

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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. Due credit will be given to neatness and adequate dimensions.
9. Assume suitable data whenever necessary.
10. Diagrams should be given whenever necessary.
11. Use of non programmable calculator is permitted.

1. a) What do you mean by N/w security? Explain the model of network security in detail. **5**

b) What are different types of attacks? Explain all category & its subtypes of attacks in detail with diagram. **9**

OR

2. a) Explain security Attributes in detail. **9**

b) Encrypt the following string using caesar cipher with key of 3 String: "Hells World". **5**

3. Explain DES with neat diagram & key generation method. How key of 64 bit is trunchited to 56 bit. **13**

OR

4. a) Describe the process of key generation is AES. **6**

b) Explain modes of operation in detail with neat diagrams. **7**

5. a) Given data is p = 07; q = 17; PT = 10 for the given data of plain text 10 (PT = 10) find the cipher text (CT) using RSA algo. **6**

b) Define the Algo for key exchange in Diffie-Hellman & also calculate keys from the following values. m = 11; g = 7. (assume suitable data if necessary) x = 3 & y = 6 cal k1 & k2. **7**

OR

6. a) Explain MAN-IN-MIDDLE Attack in detail. **6**

b) Describe ECC in detail with its Also. **7**

| 7. | a) | What do you mean by message Digest? Explain MD5 in detail. | 7 |
| | b) | Explain Public key infrastructure [PK1] in detail a with its diagram. | 6 |

OR

8.	a)	Explain various steps of kerberos system in detail.	7
	b)	Write note on X.509.	6
9.	a)	What is fire wall? Explain it in detail.	7
	b)	Write a note on Network security (IP Sec.)	7

OR

10.	a)	What is SSL / TLS? Explain in detail.	7
	b)	Write note on Trusted system.	7
11.	a)	What do you mean by e-mail security? Explain preety Good privacy.	7
	b)	Write note on S/MIME.	6

OR

| 12. | a) | What is software vulnerabilities? Explain cross site scripting. | 6 |
| | b) | Explain E-payment with payment types. | 7 |

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~ Babe Ruth