

B.E. Computer Science & Engineering (Model Curriculum) Semester-VIII
BE201CS - Computer System Security

P. Pages : 2

Time : Three Hours



GUG/W/23/14339

Max. Marks : 80

- Notes :
1. All questions are compulsory.
 2. Assume suitable data wherever necessary.
 3. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) Define session hijacking and discuss steps to mitigate session-tokens theft. 8
b) Explain various types of security attacks. 8

OR

2. Consider the plaintext "Pay more money" and use the encryption key. 16

$$k = \begin{pmatrix} 17 & 17 & 5 \\ 21 & 18 & 21 \\ 2 & 2 & 19 \end{pmatrix}$$

Perform encryption and decryption using hill Cipher technique.

3. a) Give significance of key distribution approaches of message Authentication. 8
b) Discuss secure Hash function in detail. 8

OR

4. What is an AES Algorithm? Explain with diagram. 16

5. a) Write a note on following. 10
i) Digital Signature.
ii) Digital Certification.
b) Explain key management in Kerberos. 6

OR

6. a) Discuss RSA algorithm in detail. 8
b) Explain X.509 Directory Authentication Service. 8

7. Write short note on **any two**. 16
i) SSL.
ii) Web Security Requirements.
iii) TLS.

OR

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|-----------|----|----------------------------------|----------|
| 8. | a) | Discuss IP Sec in detail. | 8 |
| | b) | Explain S/MIME in detail. | 8 |
| 9. | a) | What is trusted system? Explain. | 8 |
| | b) | Write note on Viruses. | 8 |

OR

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|------------|----|---|----------|
| 10. | a) | Discuss Intrusion detection systems. | 8 |
| | b) | Discuss significance and concept of SNMP. | 8 |
