Total No. of Questions : 6]

SEAT No. :

P160

[Total No. of Pages : 1

APR. - 16/BE/Insem. - 84
B.E. (Computer)
CYBER SECURITY
(2012 Course) (Semester - II) (Elective - III)

Time : 1½ Hour] *[Max. Marks : 30*

Instructions to the candidates:

1) ***Answer Q1 or Q2, Q3 or Q4, Q5 ir Q6.***
2) ***Neat diagrams must be drawn wherever necessary.***
3) ***Use of logarithmic tables, slide rule, charts, electronic pocket calculator and steam tables is allowed.***
4) ***Assume suitable data, if necessary.***

Q1) a) List and explain various elements of Information Security. **[4]**

b) What are the various security services. **[4]**

c) What are the security approaches used to implement security policy? **[2]**

OR

Q2) a) Draw and explain Operational Model of Network Security. **[4]**

b) List and explain different security Techniques. **[4]**

c) What is passive and active attack in information security explain with suitable example. **[2]**

Q3) a) Use Play fair cipher to encrypt the following message "This is a columnar transposition" use key - APPLE. **[5]**

b) Explain the operation of DES algorithm in detail. **[5]**

OR

Q4) a) Explain the operation of Cipher Block Chaining (CBC) Mode. **[5]**

b) Explain operation of AES algorithm and state its application. **[5]**

Q5) a) For the given parameters 'P' = 3 and 'Q' = 19 find the value of 'e' and 'd' using RSA algorithm & encrypt message 'M' = 6. **[5]**

b) What are the methods used in key distribution in public key cryptography. **[5]**

OR

Q6) a) Explain "Diffie-Hellmen" key exchange algorithm with suitable example. **[5]**

b) Explain operation of MD5 message digest algorithm. **[5]**