

Total No. of Questions : 10]

SEAT No. :

P3120

[5154]-687

[Total No. of Pages :2

**B.E. (Computer Engineering)
CYBER SECURITY (Elective - III)**

(2012 Pattern)(Semester - II) (End Sem) (410451D) (Elective - III)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8 and Q9 or Q10.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Use of logarithmic tables, slide rule, Mollier charts, electronic pocket calculator and steam tables is allowed.*
- 5) *Assume suitable data, if necessary.*

- Q1)** a) What is cryptanalysis? Explain various cryptanalysis techniques. [5]
b) Using Playfair cipher encrypt message. "We live in a world full of beauty" use key "ANOTHER" [5]

OR

- Q2)** a) Draw and explain operational model of network security. [5]
b) Explain the operation in key Expansion process in AES algorithm. [5]

- Q3)** a) Explain Cipher Feedback Mode(CFB) Block cipher. [5]
b) What is weak key in DES algorithm? Explain with example. [5]

OR

- Q4)** a) Use RSA algorithm to encrypt the plaintext "3" use following parameters
 $p = 11, q = 3, e = 13$ [5]
b) What is authentication? Explain various methods for authentication. [5]

- Q5)** a) Explain working of PGP algorithm in detail. [9]
b) Explain the operation of Secure Socket Layer(SSL) protocol in detail. [8]

OR

- Q6)** a) Explain ISAKMP protocol of ISPEC. [6]
b) What is VPN? Explain types of VPN. [6]
c) List and explain various participants involved in Secure Electronic Transaction(SET). [5]

P.T.O.

- Q7)** a) What are the challenges of intrusion detection. [6]
b) List and explain any two password management practices. [6]
c) What are the various characteristics of firewall. [5]

OR

- Q8)** a) Explain various types of firewall. [6]
b) Explain anomaly-based intrusion detection system. [6]
c) What is Trusted System. [5]

- Q9)** a) What is War dialing for remote connectivity? Explain software used for war dialing. [8]
b) Explain attacks and counter measures on application and data with examples. [8]

OR

- Q10)**a) What is VOIP hacking? What are the counter measures for it? [8]
b) Explain various hacking devices used for hacking. [8]

