

Total No. of Questions : 10]

SEAT No. :

P3660

[5561]-291

[Total No. of Pages : 2

B.E. (Computer Engineering)

CYBER SECURITY

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

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*
- 3) *Neat diagrams must be drawn whenever necessary.*
- 4) *Assume suitable data, if necessary.*

Q1) a) What are the elements of information security. **[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 various execution steps in DES algorithm. **[5]**

Q3) a) Explain Counter mode (CTR) of block cipher encryption. **[5]**

b) Describe linear and differential cryptanalysis. **[5]**

OR

Q4) a) What is Kerberos? How kerberos is used in authentication process? **[5]**

b) Explain Digital Signature Standard (DSS). **[5]**

Q5) a) Explain working of PGP algorithm in detail. **[9]**

b) Explain the operation of Secure Socket Layer protocol in detail. **[8]**

OR

P.T.O.

- Q6)** a) Describe IPsec protocol with its components in detail. [9]
b) Explain operation of ISAKMP protocol with block diagram. [8]

- Q7)** a) Explain operation of misuse-based intrusion detection system. [9]
b) What is a Trusted System? Explain its operation in detail. [8]

OR

- Q8)** a) Explain operation of screen subnet firewall architecture with its block diagram. [9]
b) What is access control? What are its types? [8]

- Q9)** a) How VoIP hacking is done by attackers? What are the Counter Measures for it?. [8]
b) Explain various attacks and countermeasures on Web Servers. [8]

OR

- Q10)** a) What is War-dialing for remote-connectivity? Explain with suitable example. [8]
b) Explain various hacking devices used for hacking. [8]

