

Total No. of Questions : 10]

SEAT No. :

P3567

[Total No. of Pages : 2

[4959] - 1167

**B.E. (Computer Engineering)**

**Cyber Security (d)**

**(2012Pattern) (Elective - III) (End Semester)**

*Time : 2 1/2 Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) *Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8, Q.9 or Q.10.*
- 2) *Figures to the right indicate full marks.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Assume suitable data if necessary.*

- Q1)** a) Explain the Operational Model of Network Security in detail. [5]
- b) Using hill cipher encrypt plain text "COE" use key "ANOTHERBZ". [5]

OR

- Q2)** a) Describe linear and differential cryptanalysis with suitable example. [5]
- b) What is Transposition Cipher? Use Transposition Cipher to encrypt the plain text "WE ARE THE BEST" use key "HEAVEN". [5]

- Q3)** a) Explain 3 DES algorithm in detail. [5]
- b) Explain the operation of Kerberos. [5]

OR

- Q4)** a) Explain various public key distribution approaches. [5]
- b) Explain Digital Signature Standard. [5]

**P.T.O.**

- Q5)** a) What is Backdoors and Key Escrow in PGP? [9]  
b) Describe IPsec protocol with its components and security services. [8]

OR

- Q6)** a) Explain OAKLEY key determination protocol. [6]  
b) What is secure Electronic Transaction? [6]  
c) Explain Secure Socket Layer handshake protocol in brief. [5]

- 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 Architecture of firewall. [6]  
b) Explain Anomaly-based Intrusion Detection System. [6]  
c) What is Trusted System? [5]

- Q9)** a) What is SIP scanning in VoIP attack? State its counter measure. [7]  
b) Identifying wireless network defenses and countermeasures. [7]  
c) What is hacking? Explain mobile hacking. [2]

OR

- Q10)** a) How various wireless devices targeted by hackers in hacking the wireless network. [7]  
b) What is USB U3 hacking. [7]  
c) What is input validation attack. [2]

