

[5254]-677

**B.E. (Computer) (Semester - II)**  
**CYBER SECURITY (Elective - III)**  
**(2012 Pattern)**

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8, Q9 or Q10.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Assume suitable data if necessary

- Q1) a) What are various security technique used in cyber security? [5]  
 b) Explain various active attacks in detail. [5]

OR

- Q2) a) Use poly alphabetic ciphers to encrypt plain text "SHE IS VERY HAPPY AND BEAUTIFUL GIRL" use key 'ANOTHER'. [5]  
 b) What is Steganography? Explain its application. [5]

- Q3) a) Explain operation of 3DES algorithm. [5]  
 b) Describe linear & differential cryptanalysis. [5]

OR

- Q4) a) Explain RSA algorithm with suitable example. [5]  
 b) What is kerberas? Explain its operation. [5]

- Q5) a) Describe Ipsec protocol with its components & security services. [9]  
 b) What is S/MIME? State operation of S/MIME in detail. [8]

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OR

- Q6) a) What is the role of OAK LEY protocol in communication? [6]  
 b) Explain the operation of secure electronic transaction protocol. [6]  
 c) State security measure applied by VPN for security. [5]

- Q7) a) List & explain types of intrusion detection system (IDS) [9]  
 b) Describe screened subnet fire wall architecture. [8]

OR

- Q8) a) Explain the firewall types with its operation. [9]  
 b) Explain operation of anomaly based intrusion detection system in detail. [8]

- Q9) a) How war dialing software are used in remote connectivity? [8]  
 b) How VoIP hacking is done by attackers? What are the counter measures for it? [8]

OR

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

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