

Total No. of Questions : 10]

SEAT No. :

P3993

[5561]-700

[Total No. of Pages : 2

B.E. (Information Technology)
INFORMATION AND CYBER SECURITY
(2015 Pattern) (414453)

Time : 2½ 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) Neat Diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Assume Suitable data, if necessary.

Q1) a) What is an Intrusion Detection System? Describe types of IDS based on method of Detection? [6]

b) Differentiate between Substitution Cipher and Transposition Cipher. [4]

OR

Q2) a) What is digital signature? Which security goals are met by signing a document using digital signature? [6]

b) What is malicious code? State few types and how each one damage or disrupt a computer system. [4]

Q3) a) Explain Elliptic Curve Cryptography. [6]

b) What is the role of X.509 in cryptography? [4]

OR

Q4) a) Describe CBC, ECB, CFB & OFB with the help of block diagram. [6]

b) Solve if $p = 7$, $q = 17$ using Diffie Hellman algorithm, select $a = 6$, $b = 4$. [4]

Q5) a) List the steps for risk identification and assessment in risk management for Information Security. [8]

b) What are the types of Laws? Differentiate between Law and Ethics. [8]

OR

P.T.O.

- Q6)** a) State the commandments for computer ethics. [8]
b) What are the objective and pros and cons of Quantitative and Qualitative risk Assessment? [8]

- Q7)** a) Discuss SSL with respect to four phases. [8]
i) Establish security capabilities
ii) Server authentication & key exchange
iii) Client authentication & key exchange
iv) Finish
b) Explain IP security protocols AH and IPSec. [8]

OR

- Q8)** a) Explain the types of Cyber - Crimes. [8]
b) What are challenges in Social engineering? Explain Cyber Stalking? [8]

- Q9)** a) Write a short note on Indian IT act 2000 and amendments in 2008. [9]
b) Explain working of Proxy Servers and Anonymizers? [9]

OR

- Q10)** a) What is DoS & DDoS Attacks? Explain with suitable examples? [9]
b) Write short note on any three: [9]
i) Nmap
ii) Wireshark
iii) Nikito
iv) Metasploit
v) Aircrack

