Total No. of Questions : 8] **SEAT No. :**

PA-1622 **[Total No. of Pages : 2**

[5926]-256

T.E. (Computer)(Honors)

CYBER SECURITY

Information and Cyber Security

(2015 Pattern) (Semester - I) (310401)

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.***
2) ***Neat diagrams must be drawn wherever necessary.***
3) ***Figures to the right indicate full marks.***
4) ***Assume suitable data, if necessary.***
5) ***Use of scientific calculator is permitted.***

Q1) a) What is cryptographic hash function? How is it useful in cryptography? List different cryptographic hash functions. Explain in detail any one cryptographic hash function. **[8]**

b) Find the key exchanged between Alok and Bobby considering following data n = 11, g = 5, x = 2, y = 3. Find the value of A,B & key K. **[9]**

OR

Q2) a) What are steps carried out in diffie hellman algorithm? List uses, advantages and disadvantages of diffie hellman algo. **[8]**

b) What do you mean by Asymmetric cryptography algorithm? Explain RSA algorithm in detail. **[9]**

Q3) a) Describe different categories of cybercrime with example. **[9]**

b) Explain the process of risk identification and risk assessment. **[9]**

OR

Q4) a) What are the difference between quantitative and qualitative risk analysis with providing examples. **[9]**

b) What is cyber stalking? How to identify and detect cyber stalking. **[9]**

Q5) a) What is SSL? How does SSL works? Why is SSL important. **[8]**

b) Describe IPSec protocol with its components and security services. **[9]**

OR

P.T.O.

Q6) a) What is the firewall? How does it works & explain different types of firewalls. **[8]**

b) What is email security and why it is necessary? Explain any one algorithm used for email security. **[9]**

Q7) a) What is malware? Enlist different types of malware what precaution needs to protect from malware. **[9]**

b) What is computer worm or virus? How does computer virus spread? How to protect against computer virus and norms. **[9]**

OR

Q8) a) Enlist different types of IDS. Describe any one type of IDS in detail. **[9]**

b) Define phishing. Explain phishing with types and examples. **[9]**

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