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10CS/IS835

**Eighth Semester B.E. Degree Examination, Dec.2019/Jan.2020**

**Information and Network Security**

Time: 3 hrs.

Max. Marks:100

**Note: Answer any FIVE full questions, selecting at least TWO questions from each part.**

**PART – A**

- 1 a. Explain the three types of security policies defined in planning security. (10 Marks)
- b. Describe the major steps involved in contingency planning with neat diagram. (10 Marks)
- 2 a. What are firewalls? Explain the processing modes of firewalls. (06 Marks)
- b. Give the best practices for firewall. (06 Marks)
- c. How do you protect remote connections? Explain. (08 Marks)
- 3 a. List the organizational requirements and constraints involved in designing Intrusion Detection System (IDS) (06 Marks)
- b. Compare Honey pots, Honey nets and padded cell systems. (06 Marks)
- c. How to deploy and implement IDS? Explain. (08 Marks)
- 4 a. Define Cryptography, Cryptosystems and Cryptanalysis. (06 Marks)
- b. Compare substitution ciphers with transposition ciphers. (06 Marks)
- c. Describe any two types of Cryptographic tools. (08 Marks)

**PART – B**

- 5 a. Compare Kerberos version 4.0 with 5.0. (06 Marks)
- b. Describe the various security mechanisms defined in X.800 services. (06 Marks)
- c. Explain the modes network security with the aid of diagram. (08 Marks)
- 6 a. What is PGP? Explain the PGP cryptographic functions with neat diagrams. (10 Marks)
- b. Explain the MIME content types of S/MIME functionalities. (10 Marks)
- 7 a. Give the application and benefits of IP security. (06 Marks)
- b. How the Oakley key determination protocol is different from Diffie – Hellman algorithm? Explain. (06 Marks)
- c. Explain Authentication Header and ESP protocol with formats. (08 Marks)
- 8 a. Explain SSL protocol architecture in detail. (10 Marks)
- b. What is SET? Explain how the cardholder sends purchase request via SET. (10 Marks)

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24 JAN 2020

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.