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|  | St. JOSEPH’S COLLEGE OF ARTS AND SCIENCE FOR WOMEN, HOSUR CONTINUOUS INTERNAL ASSESSMENT - II **NETWORK SECURITY AND CRYPTOGRAPHY** |

**Class : II M.SC.CS Marks : 50**

**Date : Time: 2 Hrs**

**PART A [10\*1=10]**

**Answer All**

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| **Q.No.** | **Question** | **BTL** |
| 1 | **What is the primary purpose of Kerberos?**  A) Encrypt email messages  B) Provide a secure method for authentication  C) Secure network protocols  D) Manage digital certificates | K1 |
| 2 | **In the X.509 standard, what is the role of a Certificate Authority (CA)?**  A) Encrypt data  B) Issue and manage digital certificates  C) Authenticate users  D) Monitor network traffic | K1 |
| 3 | **Which of the following encryption techniques is used by PGP (Pretty Good Privacy)?**  A) Asymmetric encryption only  B) Symmetric encryption only  C) Both asymmetric and symmetric encryption  D) Hashing only | K1 |
| 4 | **Which of the following best describes the term 'nonce' in authentication protocols?**  A) A reusable key  B) A number used once to prevent replay attacks  C) An algorithm for encryption  D) A type of digital certificate | K2 |
| 5 | **Which algorithm is commonly used for generating keys in PGP?**  A) RSA  B) AES  C) DES  D) MD5 | K2 |
| 6 | **What does SSL stand for?**  A) Secure Socket Layer  B) Secure Software Layer  C) Secure System Link  D) Socket Security Layer | K1 |
| 7 | **What is the primary purpose of Secure Electronic Transaction (SET)?**  A) Secure email communication  B) Secure online credit card transactions  C) Encrypt data at rest  D) Authenticate users | K2 |
| 8 | **What is the primary purpose of Secure Electronic Transaction (SET)?**  A) Secure email communication  B) Secure online credit card transactions  C) Encrypt data at rest  D) Authenticate users | K2 |
| 9 | **What is the primary function of a firewall?**  A) To encrypt data  B) To monitor and control incoming and outgoing network traffic  C) To manage user authentication  D) To scan for viruses | K1 |
| 10 | **Which attack involves an intruder trying to gain unauthorized access by guessing passwords?**  A) Phishing  B) Social engineering  C) Brute force attack  D) Man-in-the-middle attack | K1 |

**PART B [2\*5=10]**

**Answer ANY TWO questions**

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| **Q. No.** | **Question** | **BTL** |
| 11 | Describe E-mail Security | K2 |
| 12 | Explain Network Security Practice: Authentication Applications | K3 |
| 13 | Discuss the Web Security. | K2 |
| 14 | Write – Secure Electronic Transaction | K3 |

**PART C [3\*10=30]**

**Answer All**

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| **Q. No.** | **Question** | **BTL** |
| 15 | a) X.509 Authentication services and Encryption Techniques.  **OR**  b) Describe the PGP. | K3  K2 |
| 16 | a) Define Secure Socket Layer. **OR**  b) Write about Password Security. | K2  K4 |
| 17 | a) – Secure Electronic Transaction. **OR**  b) IP Security. | K2  K3 |

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