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Question Paper Code: U9907

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2024

Professional Elective

Electronics and Communication Engineering

21UEC907 CYBER SECURITY SYSTEMS

(Regulations 2021)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. Which one of the following is the most common internet protocol? CO1- U
(a) HTML (b) NetBEUI (c) TCP/IP (d) IPX/SPX
2. Which of the following is not an email-related hacking tool? CO1- U
a) Mail Password b) Email Finder Pro c) Mail Pass View d) Sendinc
3. An algorithm in encryption is called _____ CO1- U
(a) Algorithm (b) Procedure (c) Cipher (d) Module
4. Which of the following online service's privacy cannot be protected using Tor? CO1- U
(a) Browsing data (b) Instant messaging (c) Login using ID (d) Relay chats
5. What does cyber security protect? CO1- U
(a) Cyber security protects criminals
(b) Cyber security protects internet-connected systems
(c) Cyber security protects hackers
(d) none of the above
(a) Cyber security protects criminals

PART – B (5 x 3 = 15 Marks)

6. How does information get passed from one layer to the next in the Internet model? CO1-U
7. What do you understand by compliance in Cyber security? CO1-U

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| 8. | Prove that 3 is a primitive root of 7. | CO4-Ana | |
| 9. | Why Email security is important in cyberspace? | CO1-U | |
| 10. | State six objectives of PCIDSS. | CO1-U | |

PART – C (5 x 16= 80 Marks)

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| 11. | (a) Explain the various network topologies. List out its merits and demerits. | CO1-U | (16) |
| | Or | | |
| | (b) Describe about open system interconnection model with diagram. | CO1-U | (16) |
| 12. | (a) Explain the types of attacks in cyber security. | CO2-App | (16) |
| | Or | | |
| | (b) Apply the different types of OWASP algorithms to secure the information in network. | CO2-App | (16) |
| 13. | (a) Encrypt and Decrypt the message “Cyber Security And Privacy” using mono and poly alphabetic caesar cipher algorithm and analyze using K=7 and K=15 shift. | CO3-App | (16) |
| | Or | | |
| | (b) Encrypt and Decrypt the message “ECE DEPARTMENT” using poly alphabetic caesar cipher algorithm and analyze using K=8 and K=20 shift. | CO3-App | (16) |
| 14. | (a) Illustrate the nine important elements to cover a data in security policies | CO1-U | (16) |
| | Or | | |
| | (b) Discuss the benefits of Email security for Enterprises. | CO1-U | (16) |
| 15. | (a) Analyze how we can find the PCI Data Security Standard (PCI DSS) used in different levels? | CO6- Ana | (16) |
| | Or | | |
| | (b) Analyze an information security standard developed to enhance cardholder data security for organizations that store, process or transmit credit card data. | CO6- Ana | (16) |