



**Avinashilingam Institute for Home Science and Higher Education for Women**  
(Deemed to be University, Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD)  
Re-accredited with 'A++' Grade by NAAC. Recognised by UGC Under Section 12B  
Coimbatore - 641 043, Tamil Nadu, India

**Continuous Internal Assessment I – February 2025**  
**VI SEMESTER**

**Class : III UG**  
**Major: Computer Applications**

**Time : 2 Hours**  
**Max Marks: 60**

**21BCAC31 Cyber Security**

- CO1:** Identify various types of cyber-attacks, tools used for gathering information about target.  
**CO2:** Assess different types of cyber criminals and the motives behind them.  
**CO3:** Realize the exploitations and the malicious codes to be precautious.  
**CO4:** Analyze the defense techniques suitable for the system.  
**CO5:** Apply the techniques for securing the systems.

**Part – A**

**6x 1=6**

**Choose the correct answer**

1. In the CIA triad, what does the 'I' in 'CIA' stand for? CO1 K1  
A) Integrity B) Intelligence C) Identity D) Information
2. What is the purpose of a digital signature? CO1 K1  
A) To encrypt data  
B) To verify the identity of the sender and ensure data integrity  
C) To compress data  
D) To store encrypted keys
3. What is the primary purpose of a firewall in a network? CO2 K2  
A) To encrypt data before transmission  
B) To prevent unauthorized access to or from a private network  
C) To monitor network traffic for performance optimization  
D) To provide backup and disaster recovery solutions
4. What type of cyber-attack involves overwhelming a system with traffic to make it unavailable to users? CO2 K2  
A) Phishing  
B) Denial of Service (DoS)  
C) Man-in-the-Middle  
D) SQL Injection
5. What is a common tactic used in phishing attacks? CO3 K3  
A) Sending emails with malicious links or attachments  
B) Calling victims and pretending to be technical support  
C) Exploiting vulnerabilities in mobile operating systems  
D) Generating fake ad clicks
6. Click fraud is most commonly associated with which type of online activity? CO3 K3  
A) Social media hacking  
B) Online advertising campaigns  
C) Online shopping scams  
D) Mobile SMS spam

**Part B** **3x6=18**  
**Answer ALL Questions**  
**Each answer should not exceed 400 words or two pages**

- |   |      |        |
|---|------|--------|
| 7. a. Explain cryptography.                                     | (or) | CO1 K1 |
| 7. b. Discuss in detail about Firewall.                         |      | CO1 K2 |
| 8. a. Describe the different categories of phishing attack      |      | CO2 K1 |
|   | (or) |        |
| 8. b. Write about Rogue Antivirus.                              |      | CO2 K3 |
| 9. a. Explain the concept of Shell code                         |      | CO3 K3 |
|   | (or) |        |
| 9. b. Give short notes on Threat Infrastructure and Click Fraud |      | CO3 K1 |

**Part C** **3x12=36**  
**Answer ALL questions**  
**Each answer should not exceed 800 words or four pages**

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|--|------|--------|
| 10. a. Discuss about Information assurance fundamentals            | (or) | CO1 K2 |
| 10. b. Explain Microsoft Windows Security Principles.              |      | CO1 K1 |
| 11. a. Write in detail about Anti forensics: Tracks and techniques |      | CO2 K1 |
|  | (or) |        |
| 11. b. Elaborate Fraud techniques                                  |      | CO2 K3 |
| 12. a. Explain about Integer Overflow Vulnerabilities              |      | CO3 K2 |
|  | (or) |        |
| 12. b. Explain in detail about Format String Vulnerabilities       |      | CO3 K1 |

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**Staff-In-Charge: Dr.D.Ambika**