



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. CGPA 3.65/4, Category I by UGC
Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment I – August 2025
SEMESTER -V

Class :III UG
Major :Information Technology

Time: 2 hours
Max.Marks: 60

23BITDE3 Fundamentals of Cyber Security

Course Outcomes:

CO1: Evaluate the needs of the information security of data

CO2: Analyze various security threats and attacks

CO3: Assess security system policies so as to effectively protect the critical data of an organization

CO4: Frame and update cyber security tactics and policies to enhance the information security

CO5: Administer various activities related to Security Standards

Part A

6 x 1 = 6

Choose the Correct Answer

1. Which of the following is NOT a component of an Information System?
a) Hardware b) Software c) Finance d) Data CO1 K1
2. What does business process modelling primarily help in?
a) Increasing profits directly b) Visualizing workflows and processes
c) Designing websites d) Encrypting data CO1 K2
3. Which of the following is a key principle of Information Assurance?
a) Data redundancy b) Confidentiality c) Data modelling d) Cloud storage CO2 K1
4. Access control in information systems is used to _____.
a) Backup data b) Restrict unauthorized access
c) Optimize network speed d) Encrypt emails CO2 K2
5. A Distributed Denial-of-Service (DDoS) attack is an example of _____.
a) Social engineering b) Network attack c) Insider threat d) Spam CO3 K1
6. Which of the following is an essential element in developing a secure Information System?
a) Marketing strategy b) User interface design only
c) Risk assessment d) Profit analysis CO3 K2

Part B

3 x 6 = 18

Answer ALL questions

Each answer should not exceed 400 words or two pages

7. a. Demonstrate the components of an Information system with example. CO1 K2
(OR)
b. Elucidate about the different stages in process design. CO1 K2
8. a. List out the core principles of information assurance. CO2 K1
(OR)
b. Describe about the Intrusion Detection System with a neat diagram. CO2 K2
9. a. Explain about the different types of threats in electronic payment system. CO3 K2
(OR)
b. Demonstrate about E-Commerce Business models. CO3 K3

Part C

3 x 12 = 36

Answer ALL questions

Each answer should not exceed 800 words or four pages

11. a. Explain about categories of Information Systems and its components with example. CO1 K2
(OR)
b. Describe the 4 classification of individuals in information systems perspective. CO1 K2
12. a. Summarize about the classification of threats. CO2 K2
(OR)
b. Discuss the different Access control management models. CO2 K4
13. a. Evaluate the different types of firewall with examples. CO3 K5
(OR)
b. Write about Network and Denial of Service attacks with examples. CO3 K3
