

INDIRA UNIVERSITY, PUNE

SCHOOL OF INFORMATION TECHNOLOGY-SOIT BSC (CYS)

Term End Examination (2025 Pattern) December – 2025 - Semester – I

Subject Name: Fundamentals of Cyber Security
Subject Code: 25CYS101T

Max. Marks: 25
Time: 1:30 Hrs.

Instructions

- All Questions are Compulsory.

CO #	Cognitive Ability	Course Outcome
CO1	Remember	Explain key security concepts, policies, and vulnerabilities in cybersecurity.
CO3	Apply	Describe processes for planning, implementing, and maintaining security measures and assurance strategies.
CO4	Analyse	Apply suitable security controls, policies, and monitoring methods to protect information systems in operational environments.

Q1.	<p>Attempt any 5 out of 7. (1 mark each)</p> <p>a) List any four components of an Information System. b) What is Information Assurance? c) Define cryptography. d) What is spoofing? e) Define Virus. f) What is SSL? g) What is Governance Model?</p>	(5 Marks)	CO1
Q2.	<p>Attempt any 2 out of 4. (5 marks each)</p> <p>a) Explain the Information System with the help of the diagram. b) Demonstrate Threat agent with example. c) Explain why a firewall might use the 'Reject' action instead of 'Drop' when handling unwanted traffic. d) Illustrate advantages of E-Commerce.</p>	(10 Marks)	CO2
Q.3.	<p>Attempt all questions. (5 marks each)</p> <p>a) Apply the B2C and B2B E-Commerce Business Models to real-world examples b) If your college introduces a new database, how will you apply the SDLC phases to ensure it is secure?</p> <p style="text-align: center;">OR</p>	(10 Marks)	CO3

Q.3	<p>Solve the following questions. (10 marks)</p> <ul style="list-style-type: none">a) Build the process of applying authentication before granting access to a secured file. (3 M)b) Identify any two hardware attacks that expose or modify internal circuits of a chip. (4 M)c) Identify how regular software audits help to ensure compliance and security. (3 M)	CO3
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