

Roll No.

Total No. of Pages:02

Total No. of Questions: 07

B.Sc. Cyber Security ,Semester-2nd
FUNDAMENTALS OF CYBER SECURITY

Subject Code: UGCA 1971

M.Code : 91716

Date of Examination: 20-12-2025

Time: 3 Hrs.

Max. Marks:60

INSTRUCTIONS TO CANDIDATES:

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B consists of SIX questions, carrying TEN marks each and students have to attempt any FOUR questions.

Q. No.	Question	Course Outcome	Bloom's Level
SECTION-A			
1.	Answer briefly:		
a.	What is encryption?	CO1	L-1
b.	Define ethical hacking.	CO1	L-1
c.	Illustrate real-time scanning.	CO2	L-2
d.	Summarize social media privacy.	CO2	L-2
e.	List any two guidelines for creating a secure password.	CO2	L-1
f.	Recall online banking security.	CO3	L-1
g.	Outline Malware.	CO3	L-2
h.	Classify the function of a firewall in network security.	CO4	L-2
i.	Define the main objective of the IT Act 2000 in India.	CO4	L-1
j.	Explain web security.	CO4	L-2
SECTION-B			
2.	Identify the guidelines for setting up a secure password. Also describe a two-step password authentication scheme.	CO1	L-3
3.	Analyze how the rise of the Internet has led to an increase in cybercrime by explaining the history of the internet.	CO1	L-4
4.	Explain the role of smartphones in modern society and discuss the various security threats that smartphones face. What are the general guidelines for securing a smartphone against these threats?	CO2	L-5

5.	Discuss the security measures associated with debit and credit cards, including EMV chips, PINs, and OTPs.	CO3	L-6
6.	Explain the firewall and its different types. How does it work to protect a network from unauthorized access?	CO4	L-5
7.	Elaborate the terms hackers, attackers, and ethical hackers. Discuss the common methods used by attackers and the countermeasures that organizations can implement to defend against cyber attacks.	CO4	L-6

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the student.

7.	Assess the strengths and weaknesses of multiprogramming operating systems.	CO1	L5
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