

PART – B

(5 x 13 = 65 Marks)

Q.No.	Questions	Marks	KL	CO
11. a)	How do cryptography, digital certificates, and encrypted communication help to secure an e-commerce platform? Analyze how these works together to protect data and prevent attacks, and suggest ways to stop cryptographic attacks.	13	K4	CO1
	(OR)			
b)	Design a step-by-step ethical hacking plan that outlines hacking stages, tools to use, and ethical issues to consider. Assess how effective the plan would be in identifying and reducing security risks in the organization.	13	K4	CO1
12. a)	Design a network scanning and enumeration plan to find active machines, open ports, and vulnerabilities.	13	K4	CO2
	(OR)			
b)	Explain the tools and methods used for footprinting in hacking. How would a thorough footprinting process be conducted on a target organization, and what specific risks are involved, such as data exposure or unauthorized access?	13	K4	CO2
13. a)	Explain the different methods of cracking passwords in ethical hacking and how they affect security. How would a defense strategy be built to protect against these attacks?	13	K4	CO3
	(OR)			
b)	What is session hijacking, and how does it affect web security? How would a security plan be created to stop session hijacking attacks?	13	K3	CO3
14. a)	Build a security plan that protects against unauthorized access, man-in-the-middle attacks, and bluetooth vulnerabilities. Examine how effective the plan would be in securing a wireless network without restricting legitimate users.	13	K4	CO4
	(OR)			
b)	What security challenges are associated with wireless networks? Discuss the types of attacks on wireless networks and the steps that can be taken to secure them.	13	K4	CO4
15. a)	Design a penetration testing plan to identify issues like SQL injection and configuration mistakes. Discuss the tools and methods used in the plan.	13	K4	CO5
	(OR)			
b)	How does malware impact system security? Explain the types of malware and their effects.	13	K4	CO5

PART – C

(1 x 15 = 15 Marks)

Q.No.	Questions	Marks	KL	CO
16. a)	A retail company recently had a security breach where attackers accessed customer credit card information. As a security consultant, analyze the possible methods used by the attackers, such as password cracking or privilege escalation. Propose a multi-layered defense strategy to improve the company's cybersecurity and prevent future breaches.	15	K6	CO4

(OR)

b)	A multinational corporation suspects a network compromise due to suspicious log activities. As an ethical hacker, outline a detailed plan for reconnaissance and scanning to find potential vulnerabilities in the network. Include the tools, techniques, and steps for a thorough analysis while ensuring ethical and legal compliance.	15	K6	CO1
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