

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***UG/PG DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL/MAY 2026***Third Semester**Computer Science and Engineering***PCST2431- SECURITY PRACTICES***Regulations - 2024**Duration : 3 Hrs**Maximum : 100 Marks***PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)**

<i>Q.No</i>	<i>Questions</i>	<i>BTL</i>	<i>CO</i>	<i>Marks</i>
1.	Define the term 'Security Mechanism'.	L1	1	2
2.	Differentiate between a passive security attack and an active security attack.	L2	1	2
3.	List two key security objectives for protecting an Intranet.	L1	2	2
4.	Why power consumption is a critical constraint when designing security protocols for Wireless Sensor Networks?	L2	2	2
5.	Define Policy Driven System Management.	L1	3	2
6.	Write the primary purpose of a User Management System in maintaining online identity security.	L2	3	2
7.	Define Digital Forensics.	L1	4	2
8.	Why a Write-Blocker is a critical tool in the first step of Disk Forensics?	L2	4	2
9.	Define the primary objective of a Privacy Enhancing Technology.	L1	5	2
10.	Differentiate between a 'privacy policy' and a 'security policy'.	L2	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a Explain the generic model of a network security with a diagram representing the flow of secured message. Or b Compare and contrast Symmetric and Asymmetric Cryptography.	L2	1	16
12.	a A large organization is planning to deploy a new Local Area Network for its headquarters. The management is concerned about securing this critical infrastructure from both internal and external threats. Design a comprehensive security plan to secure this corporate LAN. Or b Develop a detailed incident response procedure for mobile security breach concerned with lost smart phone of an employee that is used to access corporate email which is not fully compliant with the company's security policy.	L3	2	16

13.	a	i	Explain the essential components of an Information Security Management System.	L2	3	8
		ii	Develop a detailed plan to enhance the Online Identity and User Management system of an e-commerce company that has a legacy user authentication system.	L3	3	8
	Or					
	b	i	Compare and contrast the concepts of 'IT Security' and 'Information Security'.	L2	3	8
		ii	A company's IT security policy states: "All systems must be hardened against known vulnerabilities." Develop a specific checklist of actions an IT administrator should take to implement this policy on a newly deployed Windows server.	L3	3	8
14.	a	i	Describe how a forensic investigator could use these logs to identify the 'who', 'what', and 'when' of an unauthorized data deletion event.	L2	4	8
		ii	Explain how to exploit Command Injection vulnerability in DVWA to list the contents of the current web directory. Propose two specific secure coding practices a developer must implement to prevent this vulnerability.	L5	4	8
	Or					
	b	i	Describe any four security best practices that should be integrated into the IaC development and deployment lifecycle.	L2	4	8
		ii	Evaluate four key fields within the email headers that are most crucial for tracing the email's path while investigating a sophisticated phishing campaign that originated from a compromised corporate network.	L5	4	8
15.	a	i	Analyze the concept of 'Privacy on the Internet'. Discuss any two common techniques that individuals can use to protect their online privacy with real-time examples.	L4	5	8
		ii	A mid-sized financial company is implementing a new customer relationship management system that will handle sensitive personal data. Design the key components of a robust 'Personal Privacy Policy' that the company should publish to inform its customers about how their data will be collected, used, and protected.	L3	5	8
	Or					
	b	i	Compare and contrast the function of a SAN switch with zoning capabilities and a dedicated SAN firewall.	L4	5	8
		ii	An environmental monitoring system uses a network of IoT sensors to track air quality in a city. Analyze the unique challenges and security measures to enforce in balancing 'Privacy and Security' in this system.	L3	5	8