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Task - 5

BASIC :

- 1.Inventory and Control of Hardware Assets: Maintain a list of all hardware assets, track their usage, and ensure proper disposal when needed.
- 2.Inventory and Control of Software Assets: Keep track of software applications, licenses, and versions to ensure compliance and minimize security risks.
- 3.Continuous Vulnerability Management: Regularly scan and assess systems for vulnerabilities, apply patches, and prioritize security updates.
- 4.Controlled Use of Administrative Privileges: Limit access to administrative privileges to authorized personnel and monitor their usage to prevent misuse.
- 5.Secure Configuration for Hardware and Software on Mobile Devices, Laptops, Workstations, and Servers: Configure devices and software securely to reduce potential attack surfaces.
- 6.Maintenance, Monitoring, and Analysis of Audit Logs: Keep logs of system activities, monitor them for suspicious behavior, and analyze them in case of security incidents.

Foundational:

7. Email and Web Browser Protections: Implement security measures to protect against phishing, malicious email attachments, and browser-based attacks.
8. Malware Defenses: Employ antivirus and anti-malware solutions to detect and prevent malicious software from compromising systems.
9. Limitation and Control of Network Ports, Protocols, and Services: Disable unnecessary network services, ports, and protocols to minimize potential avenues of attack.
10. Data Recovery Capabilities: Establish backup and recovery procedures to ensure data can be restored in case of data loss or cyber incidents.
11. Secure Configuration for Network Devices, such as Firewalls, Routers, and Switches: Configure network devices securely to protect against unauthorized access and attacks.
12. Boundary Defense: Implement measures like firewalls and intrusion detection/prevention systems to monitor and control traffic entering and leaving the network.
13. Data Protection: Encrypt sensitive data both in transit and at rest to prevent unauthorized access.

14.Controlled Access Based on the Need to Know: Limit access to sensitive data and systems based on the principle of least privilege.

15.Wireless Access Control: Secure wireless networks through strong encryption, authentication mechanisms, and access controls.

16.Account Monitoring and Control: Monitor user accounts for suspicious activity and promptly disable or revoke access for terminated employees.

Organizational:

17. Implement a Security Awareness and Training Program: Educate employees about cybersecurity best practices to minimize human-related security risks.

18.Application Software Security: Develop and deploy applications securely to prevent vulnerabilities and code-based attacks.

19.Incident Response and Management: Establish procedures for detecting, reporting, and responding to security incidents effectively.

20.Penetration Tests and Red Team Exercises: Conduct controlled security assessments to identify vulnerabilities and assess the organization's readiness to defend against real-world attacks.
