Assignment module 6: Network Security, Maintenance, and Troubleshooting Procedures

Section 1: Multiple Choice

1.) What is the primary purpose of a firewall in a network security infrastructure?
    ANS. Filtering and controlling network traffic.

2.) What type of attack involves flooding a network with excessive traffic to disrupt normal operation?
    ANS. Denial of service (DoS)

3.) Which encryption protocol is commonly used to secure wireless network communications?
    ANS. WPA (wifi-protected access)

4.) What is the purpose of a VPN (Virtual Private Network) in a network security context?
    ANS. creates a secure, encrypted tunnel over a public network, allowing users to transmit sensitive data privately by masking their IP address and location

Section 2: True or false

True or False: Patch management is the process of regularly updating software and firmware to address security vulnerabilities and improve system performance.

True or False: A network administrator should perform regular backups of critical data to prevent data loss in the event of hardware failures, disasters, or security breaches.

True or False: Traceroute is a network diagnostic tool used to identify the route and measure the latency of data packets between a source and destination device.

Section 3: Short

1.) Describe the steps involved in conducting a network vulnerability Assignment.
    ANS. defining the scope, asset discovery, vulnerability scanning, analysis and prioritization, risk evaluation, remediation planning, and reporting

Section 5:

1.) Discuss the importance of regular network maintenance and the key tasks involved in maintaining network infrastructure.

ANS. Regular network maintenance is crucial for ensuring optimal network performance, minimizing downtime, protecting data security, and maintaining overall operational efficiency by proactively identifying and addressing potential issues before they become major problems