*Assignment*

*module -5 Network Fundamentals and Building Networks*

*Section 1: Multiple Choice*

*1. What is the primary function of a router in a computer network?*

*Ans: Forwarding data packets between networks*

*2. What is the purpose of DHCP (Dynamic Host Configuration Protocol) in a computer network?*

*Ans: Dynamically assigning IP addresses to devices*

*3. Which network device operates at Layer 2 (Data Link Layer) of the OSI model and forwards data packets based on MAC addresses?*

*Ans: Switch*

*4. Which network topology connects all devices in a linear fashion, with each device connected to a central cable or backbone?*

*Ans: Bus*

*Section 2: True or False*

*5. A VLAN (Virtual Local Area Network) allows network administrators to logically segment a single physical network into multiple virtual networks, each with its own broadcast domain.*

*Ans. True*

*6. TCP (Transmission Control Protocol) is a connectionless protocol that provides reliable, ordered, and error-checked delivery of data packets over a network.*

*Ans. False*

*7. A firewall is a hardware or software-based security system that*

*monitors and controls incoming and outgoing network traffic based on*

*predetermined security rules.*

*Ans. True*

*Section 3: Short answer*

*8. Describe the steps involved in setting up a wireless network for a small office or home office (SOHO) environment.*

*Ans:*