**Network Fundamentals And Building Networks**

**Section 1: Multiple choice**

Q-1: what is the primary function of a router in a computer network?

Ans: Forwarding data packets between networks

Q-2: what is the purpose of DHCP (dynamic host configuration protocol) in a computer network?

Ans: dynamically assigning IP address to devices

Q-3: which network device operates at layer 2 (data link layer) of the OSI model and forwards data packets based on MAC address?

Ans: Switch

Q-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**

Q-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

Q-6: TCP (transmission control protocol) is a connection less protocol that provides reliable, ordered, and error-checked delivery of data packets over a network.

Ans: False

Q-7: A firewall is 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**

Q-8: describe the steps involved in setting up a wireless network for a small office or home office (SOHO) environment.

Ans:

* Determine the coverage area and number of devices to connect.
* Choose the network device like router.
* Set and configure the router.
* Set its range and security password.
* Connects that device to the router that want to use with network.

**Section 4: Practical Application & Section 5: Essay**

Complete in the lab.