Modul :-5 **Network Fundamentals and Building Networks.**

**Ans 1** :- c) Forwarding data packets between networks

**Ans 2** :- d) Dynamically assigning IP addresses to devices

**Ans 3** :- b) Switch

**Ans 4** :- b) Bus

**Ans 5** :- True

**Ans 6** :- False

**Ans 7** :- True

**Ans 8** :- There are few plan to setup SOHO environment like this , -- Plan: needs things (coverage, devices, speed, budget) and choose things (router, modem). Connect Hardware: Plug modem into internet line, then router into modem's WAN port. Power on both. Connection both : Connect a computer to the router via Ethernet, access its web interface (default IP/login), change default credentials, set up Wi-Fi name and a strong password , and update firmware.Optimize & Secure: Place router centrally, enable guest network, ensure firewall is active, and regularly update firmware. Connect Devices: Join wireless devices using your username and password, or use Ethernet for wired connections.

**Ans 9** :- What we'll Need:

* Your Router
* Ethernet Cable
* Internet Service Provider (ISP) Connection.

After that we go on step by step like this :- Connect Your Computer to the Router through wire Connect one end of an Ethernet cable to a LAN port on your router after that Connect the other side of the Ethernet cable to your computer's Ethernet port. Open a Web Browser and search Enter the Router's Default IP Address after that log in with username and password, Once you're logged into the router's interface, look for sections related to:  Internet, WAN,

Setup, Network,Basic Settings that type of option is available so you need to connect your isp provider. We need to DHCP server so we Choose DHCP, Automatic IP, or Dynamic IP. After selecting DHCP, look for a "Save," "Apply," "OK," or "Save Settings" button