
	<b>Selvam College Of Technology, Namakkal</b> <b>(Autonomous)</b> <b>IT Support &amp; Development Training Programme</b> <b>(ISDTP)</b>		
<b>Worksheet -8</b>			
<b>Bundle &amp;Subject Name</b>	Proficient Bundle V2 (2025) Troubleshooting V2	<b>Semester</b>	VIII

**Answer Key. (10\*1=10)**

- What is the most likely reason device on the LAN cannot access the internet despite being able to connect to the router?
  - The router's DHCP server is misconfigured
  - The LAN ports are malfunctioning
  - The router's routing table is misconfigured
  - The router's DNS settings are incorrect

**Ans: C) The router's routing table is misconfigured**
- Which of the following could prevent routing between the LAN and WAN on a router?
  - DHCP server not assigned to the WAN port
  - Incorrect static routing configuration
  - Incorrect IP address on the WAN interface
  - A malfunctioning DNS server

**Ans: B) Incorrect static routing configuration**
- What could cause the router to not route traffic from the LAN to the WAN, even if the router itself is working correctly?
  - The WAN port is in bridge mode
  - The modem's DHCP server is malfunctioning
  - The LAN IP address is incorrect
  - The router's firewall is blocking outgoing traffic

**Ans: D) The router's firewall is blocking outgoing traffic**

- Which router setting needs to be enabled for the router to translate LAN IP addresses into a public IP for internet access?
  - Routing Protocol
  - NAT (Network Address Translation)
  - DNS forwarding
  - VPN tunneling

**Ans: B) NAT (Network Address Translation)**
- Which router feature should you check if devices on the LAN can access local resources but cannot reach external websites?
  - VPN tunneling settings
  - Routing table and default gateway
  - DNS configuration on the router
  - Static IP assignment on LAN devices

**Ans: B) Routing table and default gateway**
- What could cause a router to have internet connectivity, but not route traffic from the LAN to the internet?
  - The router is configured to use a static IP for the WAN
  - The router is running in bridge mode
  - The router's DHCP server is not running
  - The router's NAT feature is disabled

**Ans: D) The router's NAT feature is disabled**
- When configuring the router's LAN ports, what should the router's LAN subnet mask typically be set to for a typical home or office network?
  - 255.255.255.255
  - 255.255.0.0
  - 255.255.255.0
  - 255.0.0.0

**Ans: C) 255.255.255.0**
- Which of the following ensures that devices within your LAN are automatically assigned IP addresses when they connect to the network?
  - Static IP addressing
  - DHCP server
  - DNS server
  - NAT

**Ans: B) DHCP server**

9. If you want devices on the LAN to communicate with each other, they must be on the same\_\_\_\_\_?
- A) IP address      B) DNS server      C) Subnet      D) Router

**Ans: C) Subnet**

10. Which of the following configurations would allow all devices on the local network to have unique IP addresses while still sharing the same network?
- A) Using DHCP on the router  
B) Assigning the same IP address to all devices  
C) Setting static IPs for each device  
D) Setting a subnet mask of 255.255.0.0

**Ans: A) Using DHCP on the router**