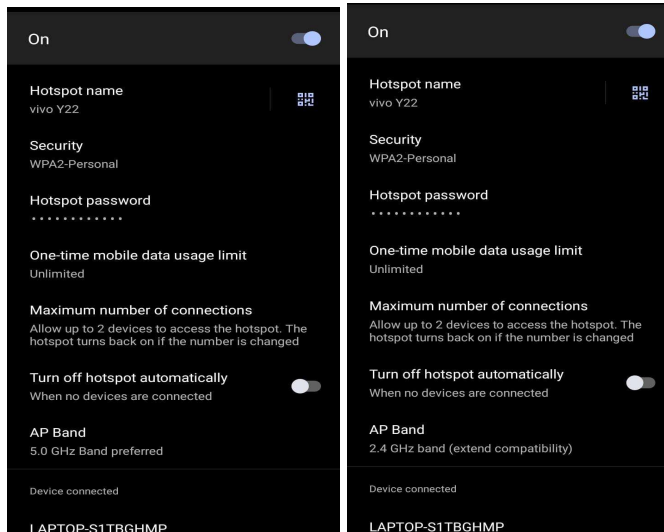


WIFI TRAINING MODULE 1 ASSESSMENT SOLUTION

-BY SAKTHI KUMAR S

7. Configure your modem/hotspot to operate only in 2.4Ghz and connect your laptop/Wi-Fi device, and capture the capability/properties in your Wi-Fi device. Repeat the same in 5Ghz and tabulate all the differences you observed during this



SSID:	vivo Y22	SSID:	vivo Y22
Protocol:	Wi-Fi 5 (802.11ac)	Protocol:	Wi-Fi 4 (802.11n)
Security type:	WPA2-Personal	Security type:	WPA2-Personal
Manufacturer:	Realtek Semiconductor Corp.	Manufacturer:	Realtek Semiconductor Corp.
Description:	Realtek RTL8821CE 802.11ac PCIe Adapter	Description:	Realtek RTL8821CE 802.11ac PCIe Adapter
Driver version:	2024.10.229.0	Driver version:	2024.10.229.0
Network band (channel):	5 GHz (36)	Network band (channel):	2.4 GHz (6)
Aggregated link speed (Receive/Transmit):	433/433 (Mbps)	Aggregated link speed (Receive/Transmit):	72/72 (Mbps)

Parameters observed:

Parameters Observed	At 2.4GHz	At 5GHz
Protocol	802.11n	802.11ac
Network Band	2.4GHz	5GHz
Channel	6	36
Link speed (Rx/Tx (Mbps))	72/72	433/433

Inference:

The 5 GHz band provides much faster speeds and better performance, especially for activities like streaming, gaming, and large file transfers.

The 2.4 GHz band is better for longer range but is limited in terms of speed due to the older 802.11n protocol and more interference.