

WiFi Training Program 2025

Name: Aswath S

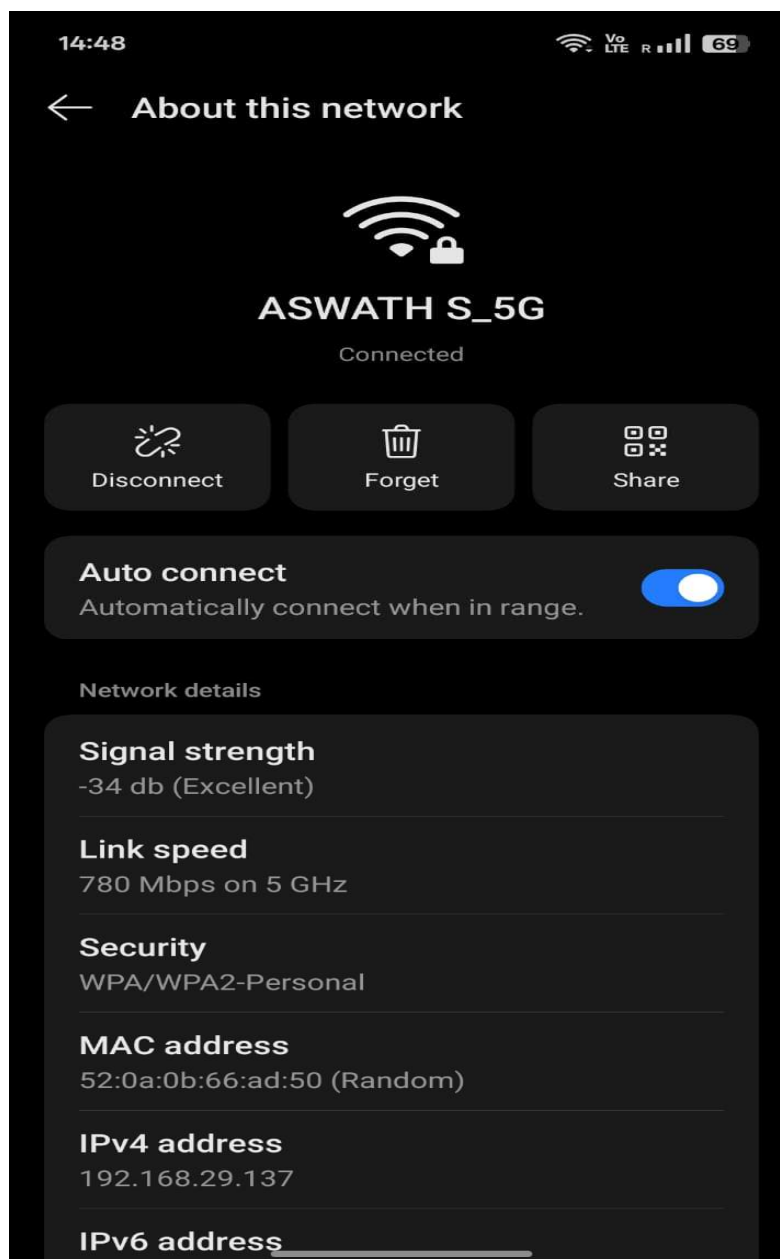
University: VIT Vellore

Reg.No: 21BEC2188

Question-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.

5GHZ connectivity:



14:48



← About this network

Network details

Signal strength

-34 db (Excellent)

Link speed

780 Mbps on 5 GHz

Security

WPA/WPA2-Personal

MAC address

52:0a:0b:66:ad:50 (Random)

IPv4 address

192.168.29.137

IPv6 address

fe80::500a:bff:fe66:ad50

2405:201:e022:10ed:500a:bff:fe66:ad50

2405:201:e022:10ed:e902:406a:9e69:d311

Advanced settings

Proxy

None ▾

IP settings

DHCP ▾

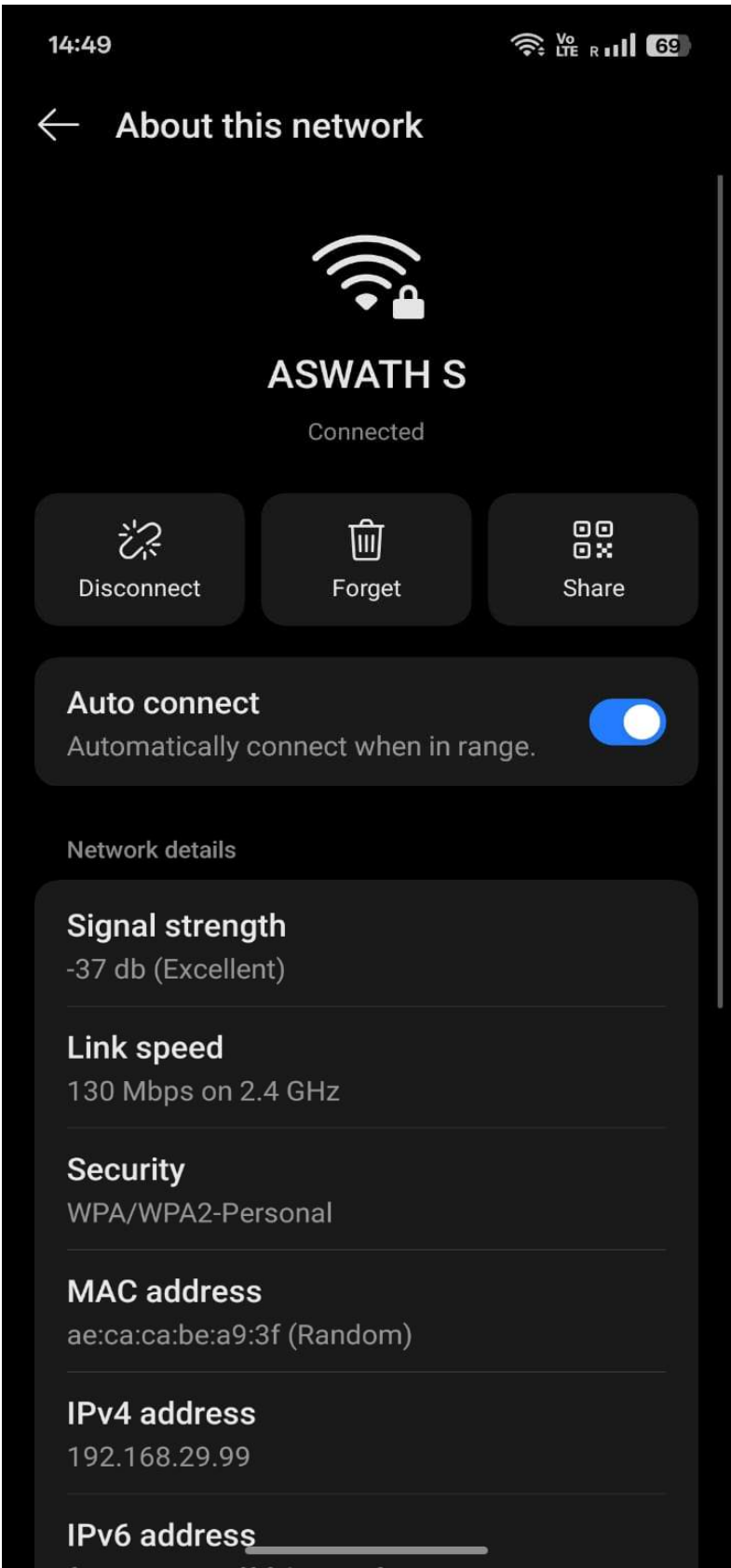
Privacy

Use random MAC address ▾

Metered

Detect automatically ▾

2.4 GHZ:



14:49



← About this network

Network details

Signal strength

-37 db (Excellent)

Link speed

130 Mbps on 2.4 GHz

Security

WPA/WPA2-Personal

MAC address

ae:ca:ca:be:a9:3f (Random)

IPv4 address

192.168.29.99

IPv6 address

fe80::acca:caff:febe:a93f
2405:201:e022:10ed:acca:caff:febe:a93f
2405:201:e022:10ed:fdc:3754:c1bb:267f

Advanced settings

Proxy

None ▾

IP settings

DHCP ▾

Privacy

Use random MAC address ▾

Metered

Detect automatically ▾

Differences Between 2.4 GHz and 5 GHz Wi-Fi

Feature	2.4 GHz (ASWATH S)	5 GHz (ASWATH S_5G)
Link Speed	130 Mbps	780 Mbps
Frequency	2.4 GHz	5 GHz
Range	Longer (better penetration through walls)	Shorter (weaker through walls)
Interference	High (crowded with devices like microwaves, Bluetooth, etc.)	Low (fewer devices use this band)
Best Use Case	Large coverage, better stability	High-speed applications like gaming, streaming