**QUESTION : WHAT ARE ALL THE CHANGES THAT CAN BE OBSERVED WHEN HOTSPOT OR MODEM FREQUENCY FROM 2.4 TO 5 GHz AND VICE VERSA**

In 2.4 GHz:

1. Change in AP frequency of usage to 2.4 GHz
2. Can be verified by “netsh wlan show interfaces” or “iwconfig”
3. WiFi Standard change (PHY mode) -> 802.11b/g/n (can be verified by checking adapter details )
4. Channel width will be either 20 or 40 MHz
5. Channel number will be typically a smaller number in the range of 1-13
6. Reduced speed
7. Since 2.4 GHz frequency is more congested with other technologies like Bluetooth and microwave oven and IoT devices, it may introduce more latency, can be verified using ping
8. Generally covers more range.

In 5 GHz:

1. Change in AP frequency of usage to 5 GHz
2. Can be verified by “netsh wlan show interfaces” or “iwconfig”
3. WiFi Standard change (PHY mode) -> 802.11ac/ax (can be verified by checking adapter details )
4. Channel width will be either 40/80/160 MHz
5. Channel number will be typically a greater number like 36 , 140 etc.
6. Increased speed in the order of 800 to 1000 Mbps.
7. Since 5 GHz frequency is not much congested with any other technologies, very lower latency may be observed when compared to 2.4GHz.
8. Generally covers less range.