1. **What is the wireless communication concept?**

Transfer of information between two or more points that are not connected by any physical medium. Wireless communications can be via Radio communication, [Microwave](https://www.elprocus.com/introduction-to-types-of-microwave-antennas-in-communication-systems/) communication, etc.

2. **What do you mean by frequency reuse?**

Each cellular Base Station is allocated a group of radio channels to be used. These radio channels can be used by another base station which is at a suitable distance away from it.

3. **What do you mean by Handoff?**

When a mobile moves into a different cell while a conversation is in progress, the Mobile Switching Center automatically transfers the call to a new channel belonging to the new Base Station. Types of handoffs are Hard Handoff and Soft Handoff.

4. **What do you mean by Mobile Station Subsystem?**

It includes mobile equipment which refers to a physical terminal such as a telephone which includes the radio, trans-receiver, signal processor and the Subscriber Identity Module

5. **What do you mean by Base Station Subsystem?**

It consists of one or more BTS and BSC. Each BTS is related to one cell which includes an antenna, a video trans-receiver, and a link to BSC. BSC controls multiple BTS units, manages the handoffs of the mobiles, and controls the paging.

7. **What do you mean by Ad-hoc networks?**

Wirelesses Local Area Network that does not require any infrastructure to work. Each node can communicate directly with other nodes. So, no access point is required.

8. **What is the difference between 3G and 4G?**

3G stand for 3rd generation while 4G means 4th generation. This is a set of standard that is being developed as a future successor of 3G in the very near future.

4G speeds are meant to exceed that of 3G. **3G** uses **circuit switching** **technique** while **4G** uses **packet switching** **technique**.

10. **What are the different types of transmission impairment?**

When the received signal is not as same as the transmitted signal then it is known as Transmission impairment. Three different types are Attenuation, Noise, and Delay-Distortion.

11. Multiplexing types?

SDM (Space Division Multiplexing)

CDM (Code Division Multiplexing)

TDM (Time Division Multiplexing)

FDM (Frequency Division Multiplexing)