5G - TECHNOLOGY

If we look back, we will find that every next decade, one generation is advancing in the field of mobile technology. Starting from the First Generation 1*G* in 1980s, Second Generation 2*G* in 1990s, Third Generation 3*G* in 2000s, **Fourth Generation** **4*G*** in 2010s, and now Fifth Generation 5*G*, we are advancing towards more and more sophisticated and smarter technology.

What is 5G Technology?

The 5G technology is expected to provide a new *muchwiderthanthepreviousone* frequency bands along with the wider spectral bandwidth per frequency channel. As of now, the predecessors *generations* mobile technologies have evidenced substantial increase in peak bitrate. Then — how is 5G different from the previous one *especially*4*G*? The answer is — it is not only the increase in bitrate made 5G distinct from the 4G, but rather 5G is also advanced in terms of −

- High increased peak bit rate
- Larger data volume per unit area *i. e. highsystemspectralefficiency*
- High capacity to allow more devices connectivity concurrently and instantaneously
- Lower battery consumption
- Better connectivity irrespective of the geographic region, in which you are
- Larger number of supporting devices
- Lower cost of infrastructural development
- Higher reliability of the communications

As researchers say, with the wide range of bandwidth radio channels, it is able to support the speed up to 10 Gbps, the 5G *WiFi* technology will offer contiguous and consistent coverage − "wider area mobility in true sense."