

## Assignment 2 from (Unit 2 and 3)

**Attempt all questions.**

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### Part - A

- Why frequency reuse is important in cellular communication?
- How frequency reuse increases capacity of a cellular system?
- What is difference between handoff and handover?
- What is the difference between TDMA and FDMA?
- What is difference between CDMA and FDMA?
- Which is better TDMA or CDMA?
- What is the difference between ALOHA and Slotted ALOHA?
- What are the 4 types of handovers available in GSM?
- What are the key advantages of GSM technology compared to its predecessors, such as analog cellular systems?
- What does GSM stand for, and what is its primary purpose?

### Part - B

- What is the significance of frequency bands in wireless communication, and how do they relate to channels?
- Why is it important to carefully manage and allocate frequency bands and channels in wireless networks?
- What is hard and soft handoff?
- What is the significance of 3G cellular systems, and how do they differ from earlier generations of mobile networks?
- What is MMS, and how does it work within 3G cellular systems?
- What are the primary differences between GEO, LEO, and MEO satellite systems in terms of their orbits and applications?
- What are some advantages and disadvantages associated with each of the GEO, LEO, and MEO satellite systems?

- What are the key technological advancements and features that distinguish 4G cellular systems from their predecessors, such as 3G?
- How does 4G LTE (Long-Term Evolution) technology contribute to the success and widespread adoption of 4G cellular networks?
- What is frequency reuse formula?

**Submit/Upload on your GCR, Assignment BEFORE OR 20-09-2023**