WIRELESS & MOBILE COMMUNICATION (18CSE458T)

Assignment-1

- 1. If a total of 33 MHz of bandwidth is allocated to a particular FDD cellular telephone system which uses two 25 KHz simplex channels to provide full duplex voice and control channels, compute the number of channels available per cell if a system uses (i) 4 cell reuse (ii) 7 cell reuse and (iii) 12 cell reuse.
- **2.** What is the purpose of modulation in wireless communication? Provide examples of different modulation techniques.
- **3.** Describe the difference between FDMA, TDMA, and CDMA in terms of multiple access techniques.
- **4.** What is the role of base stations in cellular networks?
- 5. Explain the terms 'uplink' and 'downlink' in the context of wireless communication.