|  |
| --- |
| WN IAE 1 QB(2019-2020) |
|  |
|  |
| 1. Differentiate between TDMA/FDD and TDMA/TDD systems. |
| 1. Can CSMA/CD be used in wireless network? If not, why? |
|  |
| 1. Draw and explain frequency spectrum. |
| 1. Explain how the following multiple access techniques are used in wireless communications: 2. FDMA b) TDMA c) CDMA |
| 1. What is the difference between GSM and GPRS? Describe the functions of the network elements in GPRS that are different from GSM. 2. Explain CSMA multiple access technique with its variants 3. Describe how wireless networks can reduce installation time and cost? 4. Cellular system problems 5. How can GPRS achieve raw data through put of 171.2 kbps? 6. How does TDD works? 7. Classify and explain frequency hopping techniques (slow hopping and fast hopping) 8. Explain TDMA system and draw typical TDMA frame structure, TDMA frame and time slot structure 9. Differentiate between DSSS and FHSS. 10. Explain frequency reuse concept with neat diagram and state the mechanism to calculate frequency re-use distance q. 11. Write about the GSM logical channel hierarchy in detail 12. The channel data rate is 270.833kbps in GSM standard that is 40% of theoretical maximum [4] data rate that can be supported in a 200kHz channel bandwidth. Calculate the corresponding theoretical S/N required. 13. Differentiate between 1G,2G,3G and 4G mobile communication standards. |