BACHELOR OF TECHNOLOGY (C.B.C.S.) (2020 COURSE) B.Tech.Sem - IV COMPUTER :SUMMER- 2022 SUBJECT : ITC-II: WIRELESS COMMUNICATION

Time: 10:00 AM-01:00 PM

Day: Friday

Date: 24-06-2022 S-24237-2022 Max. Marks: 60 N. B. : All questions are **COMPULSORY**. 1) 2) Figures to the right indicate FULL marks. Draw neat and labelled diagrams $\ensuremath{\mathbf{WHEREVER}}$ necessary. 3) Use of non-programmable calculator is **ALLOWED**. 4) 5) Assume suitable data, if necessary. **Q.** 1 Explain DSSS with binary phase shift keying and compare its performance (10) with FSSS. OR Define briefly the operations of a Time Division Multiple Access (TDMA) (10) Schemes. Q. 2 Compare classical ALOHA and slotted ALOHA. (10)OR Describe in detail about the multiple access with collision avoidance. (10)Explain the process of call organisation and call termination in GSM. (10)Q. 3 **OR** With neat sketch discuss about UMTS system architecture. (10)With suitable diagram explain launching mechanism and solve the following: Q. 4 A satellite is orbiting in a geosynchronous orbit of radius 42500 km. Find the velocity and time of orbit. OR Discuss in detail about satellite links and TCP. (10)With neat diagram explain IEEE 802.11 system architecture. (10)Q. 5 (10)Discuss about Bluetooth architecture. List and explain various methods of congestion control in mobile (10) Q. 6 communication. OR Explain Mobile TCP with advantages and disadvantages (10)

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