

Code: ECMC2T2

I M.Tech-II Semester–Regular/Supplementary Examinations – July 2017

**WIRELESS COMMUNICATIONS AND NETWORKS
(MICROWAVE & COMMUNICATION ENGINEERING)**

Duration: 3 hours

Max Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. a) Discuss different techniques used for improving coverage and capacity in cellular systems. 7 M

b) Explain frequency reuse in detail. 7 M

2. a) Compare Between FDMA, TDMA, CDMA, SDMA. 7 M

b) If a normal GSM time slot consists of 6 trailing bits, 8.25 guard bits, 26 training bits, and 2 traffic bursts of 58 bits of data, find the frame efficiency. 7 M

3. a) Discuss the features of X.25. 7 M

b) Distinguish between circuit switching and packet switching. 7 M

4. a) Explain the different layers of the SS7 protocol architecture with a neat diagram. 7 M

- b) Explain the CCS and distributed central switching office for CCS. 7 M
5. a) Illustrate the operation of Mobile IP with a neat figure of Mobile IP. 7 M
- b) What is WDP? Explain the fields of Wireless Datagram Protocol. 7 M
6. a) Give the format of IEEE 802.11 MAC frame and explain each field. 7 M
- b) List and explain the transmission techniques commonly used for IR LANs data transmission. 7 M
7. a) Explain the three error correction schemes used by Bluetooth at the baseband level. 7 M
- b) List and describe the three types of logical channels provided by L2CAP. 7 M
8. a) Draw and explain the packet transfer on the uplink and downlink in GPRS. 7 M
- b) Write short notes on data oriented CDPD Networks. 7 M