CBCS SCHEME

USN | | | | | | | | | | | **17MT551**

Fifth Semester B.E. Degree Examination, Feb./Mar. 2022
Wireless Networks and Communication

Time: 3 hrs.   Max. Marks: 100

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1   a.   With a neat block diagram, explain wireless communication system. List out merits and demerits of wireless communication system. **(10 Marks)**
    b.   With a neat diagram, give classification of wireless networks based on range and application. **(10 Marks)**

OR

2   a.   Discuss wireless communication problems encountered in wireless network. **(10 Marks)**
    b.   Discuss and explain various networking issues encountered in wireless network. **(10 Marks)**

Module-2

3   a.   Explain networks architecture and design issues in WBAN system. **(10 Marks)**
    b.   Discuss WBAN routing protocols SMAC and TMAC. **(10 Marks)**

OR

4   a.   Explain WPAN networks architecture and topologies. **(10 Marks)**
    b.   Explain protocol stack arrangement Bluetooth technology. **(10 Marks)**

Module-3

5   a.   Explain error detection and correction coding techniques in wireless telecommunication system. **(10 Marks)**
    b.   Explain QPSK digital modulation technique. **(10 Marks)**

OR

6   a.   Explain diversity techniques in wireless communication. **(10 Marks)**
    b.   Explain ultra wideband radio technology. **(10 Marks)**

Module-4

7   a.   Explain design requirements of WLAN. **(10 Marks)**
    b.   Discuss the features of WIMAX. **(10 Marks)**

OR

8   a.   Explain with a neat diagram GSM networks architecture. **(10 Marks)**
    b.   Discuss the WLAN standards. **(10 Marks)**

Module-5

9   a.   Explain 5 routing protocols of wireless sensor network (WSN). **(10 Marks)**
    b.   Explain MANET single hop and multihop architecture. **(10 Marks)**

OR

10 a.   Explain the quantitative and qualitative features of wireless Adhoc networks. **(10 Marks)**
    b.   Explain the characteristics and architecture of VANETs. **(10 Marks)**

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