



# CBCS SCHEME

15MT551

## Fifth Semester B.E. Degree Examination, Aug./Sept.2020 Wireless Networks and Communication

Time: 3 hrs.

Max. Marks: 80

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

### Module-1

- 1 a. With neat block diagram, explain wireless communication system. (08 Marks)  
b. With neat diagram, give classification of wireless network based on range and application. (08 Marks)

OR

- 2 a. Discuss wireless communication problems encountered in wireless network. (08 Marks)  
b. Explain various networking issues encountered in wireless network. (08 Marks)

### Module-2

- 3 a. Explain network architecture and design issues in WBAN system. (08 Marks)  
b. Discuss WBAN routing protocols, S – MAC and T – MAC. (08 Marks)

OR

- 4 a. Explain W – PAN network architecture and its topologies. (08 Marks)  
b. Explain with neat diagram Zigbee stack architecture. (08 Marks)

### Module-3

- 5 a. Explain QPSK modulation technique. (08 Marks)  
b. Explain error detection and error correction coding technique. (08 Marks)

OR

- 6 a. Explain diversity techniques in wireless communication. (08 Marks)  
b. Explain ultra wideband radio technology. (08 Marks)

### Module-4

- 7 a. Explain design requirements of WLAN. (08 Marks)  
b. Discuss various W – LAN standards. (08 Marks)

OR

- 8 a. Discuss features of WI – MAX. (08 Marks)  
b. Explain with neat diagram GSM network architecture. (08 Marks)

### Module-5

- 9 a. Explain quantitative and qualitative features of wireless Adhoc networks. (08 Marks)  
b. Explain with neat diagram wireless sensor network architecture. (08 Marks)

OR

- 10 a. With a neat diagram, explain architecture and protocols in VANET. (08 Marks)  
b. Explain the characteristics of VANET. (08 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and/or equations written eg, 42+8 = 50, will be treated as malpractice.