Reg. No. : | | | | | | | | | | |

Question Paper Code: 36402

B.E. / B.Tech. DEGREE EXAMINATION, AUGUST 2021

Sixth Semester

Electronics and Communication Engineering

14UEC602 - WIRELESS COMMUNICATION SYSTEMS

(Regulation 2014)

Duration: 1:45 hour Maximum: 50 Marks

PART A - (10 x 2 = 20 Marks)

(Answer any ten of the following questions)

1. List the three most important effects of small-scale multipath propagation.
2. Mention the significant of frequency reuse in cellular networks.
3. Define Snell's law.
4. Compare slow fading and fast fading.
5. State advantages of offset-QPSK.
6. Define cyclic prefix.
7. State the principle of diversity.
8. Mention any four common methods of micro diversity.
9. State effects of multipath propagation on CDMA.
10. What is frequency hopping spread spectrum?
11. What are the different types of services in wireless communication?
12. Mention the significant of frequency reuse in cellular networks.

13. Define Snell's law.

14. Distinguish between narrowband and wideband systems.

15. State advantages of offset-QPSK

PART – B (3 x 10= 30 Marks)

(Answer any three of the following questions)

16. Explain the principle of cellular networks and various types of Handoff techniques. (10)

17. Describe the time variant two ray model of a wireless propagation channel. (10)

18. Explain with neat diagram about Quadrature Phase Shift Keying (QPSK) based transmission and reception technique. (10)

19. Explain with diagram, the different techniques available for signal combining. (10)

20. Compare and contrast 2G, 3G and 4G wireless network standards with its merits and demerits. (10)