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**Question Paper Code: 59413**

B.E./B.Tech. DEGREE EXAMINATION, SEP 2020

Elective

Electronics and Communication Engineering

15UEC913 - WIRELESS NETWORKS AND STANDARDS

(Regulation 2015)

Duration: One hour

Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

**(Answer any Six of the following Questions)**

1. Which one is not a TDMA standard of second generation networks? CO1- R  
(a) GSM (b) IS-136 (c) AMPS (d) PDC
2. What are the types of channel assignment? CO1- R  
(a) Fixed channel assignment (b) Moderate channel assignment  
(c) Dynamic channel assignment (d) All of these
3. The uplink frequency of P-GSM system is CO2- U  
(a) 1850-1910 MHz (b) 1710-1785 MHz (c) 890-915 MHz (d) 900-1100 MHz
4. Which of these are Digital Cellular Technologies CO2- R  
(a) IS:54 / IS-136 – N America (b) GSM – Europe and Asia  
(c) IS-95 – N America (d) cdma 2000
5. \_\_\_\_ carries digitally encoded user data. CO2- R  
(a) Traffic Channels (b) Control Channels  
(c) Signaling Channels (d) Forward Channels
6. Which of the following specifies a set of media access control (MAC) and physical layer specifications for implementing WLANs? CO3- R  
(a) IEEE 802.16 (b) IEEE 802.3 (c) IEEE 802.11 (d) IEEE 802.15

7. What is the range of asynchronous user data rates provided by HIPER-LAN? CO3- R  
 (a) 1-100 Mbps      (b) 50-100 Mbps      (c) 1-20 Mbps      (d) 500 Mbps – 1Gbps
8. Which of the following WLAN standard has been named Wi-Fi? CO4- R  
 (a) IEEE802.6      (b) IEEE 802.15.4      (c) DSSS IEEE 802.11b      (d) IEEE 802.11g
9. MANET stands for CO4- R  
 (a) Multiple ad hoc net      (b) Multiple access net  
 (c) Mobile access net      (d) Mobile ad hoc net
10. Here are the types of Ad Hoc Networks except CO4- R  
 (a) WARNET      (b) MANET      (c) WANET      (d) VANET

PART – B (3 x 8 = 24 Marks)

**(Answer any Three of the following Questions)**

11. Explain in detail the performance of the random access scheme for data oriented networks. CO1- U      (8)
12. Explain in detail about Fixed-Assignment for Voice Oriented Networks. CO1- U      (8)
13. Compare the various parameters for WCDMA and CDMA2000. CO2- U      (8)
14. Describe IEEE Standards 802.15 in detail. CO3-U      (8)
15. Outline the design challenges in mobile adhoc networks and wireless sensor network. CO4-U      (8)