C **Reg. No. :** | | | | | | | | | | |

Question Paper Code: 56401

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2019

Sixth Semester

Electronics and Communication Engineering

15UEC601-WIRELESS COMMNICAION SYSTEMS

(Regulation 2015)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. Radio capacity may be increased in cellular concept by_____. CO1-R

   (a) Increase in radio spectrum

   (b) decreasing radio spectrum

   (c) Increasing the number of base stations & reusing the channels

   (d) Decreasing the number of base stations

2. Mobile Assisted Handoff (MAHO) provides__. CO2-R

   (a) Faster handoffs (b) frequent handoffs

   (c) No monitor of signal strength by MSC (d) All the above.

3. Identify the incorrect option related to OFDM. CO3-R

   (a) Multi carrier method (b) Encoding digital data

   (c) Short band digital communication (d) 4G mobile communication

4. Which of the following is NOT a diversity Scheme? CO4-R

   (a) Time (b) Frequency (c) Space (d) Doppler

5. A_____ system is any collection of elements (or subsystems) that operate interdependently and use unguided electromagnetic-wave propagation to perform some specified function(s). CO5-R

   (a) wireless (b) Cellular (c) Satellite (d) Mote G

PART – B (5 x 3= 15Marks)

6.		Distinguish between fixed channel assignment and dynamic channel assignment methods.	CO1-R	
7.		Classify path loss model.	CO2-R	
8.		Recall the advantages and disadvantages of Offset-QPSK,.	CO3-R	
9.		Outline Zero Forcing algorithm.	CO4-R	
10.		List the limitations in wireless networking.	CO5-R	

PART – C (5 x 16= 80Marks)

11.	(a)	Analyze the different methods to improve coverage and channel capacity in cellular systems.	CO1-U	(16)
		Or		
	(b)	Compare and contrast FDMA,CDMA,SDMA,TDMA	CO1-U	(16)
12.	(a)	Using neat ray diagram, explain the Link Budget design for wireless channel.	CO2-App	(16)
		Or		
	(b)	Illustrate Parameters of mobile multipath channels.	CO2-App	(16)
13.	(a)	Describe about Transceiver Implementation.	CO3-U	(16)
		Or		
	(b)	Using suitable signals and spectrum, explain the concept of OFDM.	CO3-U	(16)
14.	(a)	Explain the concept of Adaptive equalization.Bring out the salient features.	CO4-U	(16)
		Or		
	(b)	Analyze the various Diversity combining techniques.	CO4-U	(16)
15.	(a)	Summarize the types of 802.11 wireless standards.	CO5-U	(16)
		Or		
	(b)	Explain the architecture of wireless network.	CO5-U	(16)