

Name.		Printed Pages:01		
Student Admn. No.:				
School of Electrical, Electronics and Communication Engineering End Term Examination (ETE), May 2022, Winter 2021-22 [Programme: B. Tech., ECE] [Semester: VI] [Batch: 2020-24]				
Course Title: Advanced Communication System			Max Marks: 50	
Course Code: BEE01T3005			Time: 3 Hrs.	
Instructions:	1. All questions are compulsory. 2. Assume missing data suitably, if any.			
SECTION-A (10 Marks)			2 Marks each	
1.	Distinguish between analog and digital communication?	CO1	K1	2
2.	What do you mean by modulation. Write its uses in digital communication?	CO2	K1	2
3.	How spread spectrum methods are classified?	CO3	K2	2
4.	Explain briefly Quality of Service (QoS) in communication system.	CO4	K2	2
5.	Discuss the _advantages and _disadvantages of 4G (LTE)?	CO5	K2	2
SECTION-B (16 Marks)				
6.	Explain the working of OFDM? Why has there been all the interest in OFDM in the last few years?	CO1	K3	5
7.	Eighteen voice mediums of 2 kHz BW each_ sampled at nyquist rate and encoded into 4-bit (Pulse Code Modulation) are time division multiplexed with 1 bit per frame as _synchronization bit. Calculate the bit rate at the output of multiplexers ?	CO2	K3	5
8.	Elaborate the Emerging Trends and Technologies in 5G Networks	CO6	K4	6
SECTION-C (24 Marks)			8 Marks each	
9.	Explain the different multiple access techniques with their comparison?	CO3	K4	8
10.	Explain WiMAX technology with its architecture and components?	CO4	K5	8
11.	Write down the comparison between PCM, DM, ADM and DPCM.	CO5	K5	8