

Exam.Code:0970
Sub. Code: 34553

2056

M.E. (Electronics and Communication Engineering)
Second Semester
ECE-1203: Wireless and Mobile Communication

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Part.

x-x-x

1.	i. State any two differences between reflection and diffraction in radio propagation. ii. Explain the concept of multipath reception. iii. Define cellular system capacity. iv. What is meant by channel assignment in cellular networks? v. What does 3GPP stand for in 5G standardisation?	2x5
	PART A	
2.	(a) Explain the different types of channel interference in cellular systems. (b) State the advantages and limitations of Frequency reuse.	6, 4
3.	Describe UMTS architecture and interfaces with channel and handover management.	10
4.	Explain LTE architecture with the help of a diagram.	10
	PART B	
5.	Explain MIMO-OFDM architecture. Also, state the advantages of MIMO.	10
6.	(a) Describe radio propagation mechanisms and types of fading in wireless communication. (b) State the Benefits of flexible spectrum usage.	7, 3
7.	Explain the evolution from LTE to 5G and describe 5G NR architecture.	10

x-x-x