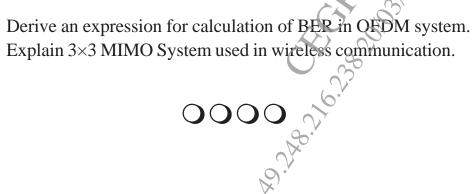
Total No. of Questions: 4] PB-130		of Questions : 4] SEAT No. :	
		[Total No. of Pages	:1
		[6269]-344	
	,	T.E. (Electronics & Telecommunication) (Insem)	
		CELLULAR NETWORKS	
		(2019 Pattern) (Semester-II) (304192)	
		Hour] [Max. Marks:	30
Instr	uction 1)	ons to the candidates: \Answers Q.1 or Q.2, Q.3 or Q.4.	
	2)	Figures to the right side indicate full marks.	
	3)	Neut diagrams must be drawn wherever necessary.	
	<i>4</i>)	Assume Suitable data if necessary.	
01)	۵)	Define and explains Dath loss DE signal interference and Feding	Γ 6 1
<i>Q1</i>)	,		[6]
	b)	Explain free space propagation model. Also write an equation of receive power in free space propagation.	/eu [5]
	c) _N		[3] [4]
	C) \	OR OR	[ד]
<i>Q</i> 2)	a)	Compute median loss for large city by considering Hata model at a distar	nce
~ /	/	of 3Km with carrier frequency of 2,1 GHz and transmitting and receiving	
			[6]
	b)	With neat diagram explain ground reflection in wireless communicati	ion
		system.	[5]
	c)	Explain channel estimation techniques.	[4]
		6.	5
<i>Q3</i>)	a)	What is concept of OFDM? List the advantages of OFDM.	[5]
	b)	Calculate total no. of samples transmitted with cyclic prefix if total no.	of
		subcarrier, N=256 & bandwidth per subcarrier = 15.625 KHz	[5]
	c)	What is importance of cyclic prefix in OFDM?	[5]
		OR	
Q4)	a)	Explain block diagram of multicarrier transmission system used in OFD	M.
			[5]
	b)	Derive an expression for calculation of BER in OFOM system.	[5]



[5]

c)