	Enrollm	ent No•		Exam Seat No:					
				UNIVERSITY		-			
	<b>Summer Examination-2019</b>								
	Subject 1	Name : A	Antennas & Wave Propag	gation					
	Subject Code: 4TE06AWP1			Branch: B.Tech (EC)					
	Semester	r: 6	Date: 20/04/2019	Time: 10:30 To 01:30	Marks: 70				
	Instruction	ons:							
	(2) I (3) I	nstructio Draw nea	•	any other electronic instrument is p book are strictly to be obeyed. necessary) at right places.	rohibited.	_			
Q-1		Attemp	ot the following questions	:		(14)			
	a)	What is	Antenna Bandwidth?						
	<b>b</b> )		Resonant and Non-resonan	nt antennas					
	<b>c</b> )	What is	relation of Antenna gain a	and directivity?					
	d)		Virtual Height.						
	<b>e</b> )		Maximum Usable Frequen	ncy (MUF)					
	f)		pattern multiplication?						
	<b>g</b> )		ntenna can produce which	polarization?					
	<b>h</b> )		Super refraction?						
	i)		Fading? Front to Back Ratio.						
	j)		Effective Aperture						
	k) l)		Beam Solid angle of an A	ntenna?					
	m)		Radiation Resistance.	interma:					
	n)			magnetic fields from antenna?					
Atter	mpt any f	four ques	stions from Q-2 to Q-8						
Q-2		Attemp	ot all questions			(14)			
-	(a)	_	radiation from an oscillati	ing dipole.		07			
	<b>(b)</b>	Disting	uish between Hertzian Dip	ole and Folded Dipoles.		07			
Q-3		Attemp	ot all questions			(14)			
-	(a)	_	Reciprocity theorem			07			
	<b>(b)</b>	Explain	Microstrip Patch Antenna	l		<b>07</b>			



Attempt all questions
Explain broad side and end fire array.
Explain Babinet's principle of slot antenna.

Q-4

(a) (b) (14) 07

**07** 

Q-5		Attempt all questions	(14)
	(a)	Describe Yagi-Uda Antenna.	07
	<b>(b)</b>	Describe Helical Antenna geometry.	07
Q-6		Attempt all questions	(14)
	(a)	Describe Rectangular Horn Antennas	07
	<b>(b)</b>	Explain the any one type of antenna measurements.	07
Q-7		Attempt all questions	(14)
	(a)	Using neat diagram describe Ground Wave Propagation	07
	<b>(b)</b>	Explain Space Wave Propagation	07
Q-8		Attempt all questions	(14)
-	(a)	Describe structure and characteristics of Ionospheric layers.	07
	(b)	Using necessary illustrations, describe parabolic reflector.	07

