Vivekananda College of Engineering & Technology, Puttur [A Unit of Vivekananda Vidyavardhaka Sangha Puttur ®] Affiliated to VTU, Belagavi & Approved by AICTE New Delhi			
CRM08	Rev 1.10	<EC>	<13/06/2022>

CONTINUOUS INTERNAL EVALUATION - 2

Dept: ECE	Sem / Div: VI	Sub: Microwave and Antennas	S Code:18EC63
Date:16/06/22	Time:9:30-11:00 am	Max Marks: 50	Elective: N

Note: Answer any 2 full questions, choosing one full question from each part.

QN		Questions	Marks	RBT	CO's
		PART A			
1	a	With a neat diagram explain precision type variable attenuator.	9	L2	CO2
	b	What is magic Tee? Derive its S matrix.	9	L3	CO2
	c	Which are the losses in microstrip line. Explain dielectric losses.	7	L2	CO2
		OR			
2	a	What is reciprocal device? Write four point comparison among [S], [Y], [Z] matrices.	9	L2	CO2
	b	Two transmission lines of characteristic impedance Z_1 and Z_2 joined at PP'. Express S matrix interms of impedance when each line is matched terminated.	9	L3	CO2
	c	Explain coplanar strip lines and shielded strip line.	7	L2	CO2
		PART B			
3	a	Explain the different types of coaxial connectors in microwave circuits.	9	L2	CO2
	b	Which are the different losses interms of S parameter in microwave network.	9	L2	CO2

	c	In a H plane T junction, compute the power delivered to the loads of 40 ohm and 60 ohm connected to arm 1 and 2 when a 10mW power is delivered to the matched port 3. assume characteristics impedance of line is 50 ohm.	7	L3	CO2
		OR			
4	a	Describe ohmic losses and radiation losses in micro strip lines.	9	L2	CO2
	b	With a neat diagram explain rotary precision phase shifter.	9	L2	CO2
	c	A shielded strip line has the following parameters dielectric constant of the insulator €r= 2.56 strip width: w= 25 mils strip thickness: t=14 mils shield depth: d=70 mils	7	L3	CO2

Prepared by: SHRUTHI P R

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