

Unit-IV

S.No	Questions	BT	CO	PO
Part – A (Short Answer Questions)				
1	Write properties of s-matrix	L2	C04	PO1
2	Why two port network is not suitable for microwave?	L2	C04	PO1
3	What is operation of Directional coupler	L1	C04	PO1
4	What is reflection co-efficient explain in terms of VSWR	L2	C04	PO1
5	Define the attenuation	L2	C04	PO1
6	How to find Cavity Q? Explain	L2	C04	PO2
7	What is the operation of Isolator	L2	C04	PO1
8	Explain the slotted line	L2	C04	PO1
9	Find the reflection coefficient if VSWR=3.	L1	C04	PO2
10	Using double minima method, find SWR for $\lambda_g = \pi$ cm and distance between the positions of twice minimum power is 0.5 cm.	L2	C04	PO2

Part – B (Long Answer Questions)

11	a)	Derive the S-Matrix of E-plane tee when power is fed from auxiliary port. Consider other ports in the matched condition	L3	C04	PO3
	b)	Using S-Matrix explain the operation of Magic tee	L3	C04	PO3
12	a)	Derive S-matrix of Directional Coupler	L4	C04	PO3
	b)	Derive S-matrix of Circulator	L2	C04	PO3
13	a)	What is the Importance S-matrix in microwave explain it's properties	L2	C04	PO1
	b)	Derive the S-Matrix of H-plane tee when power is fed from auxiliary port. Consider other ports in the matched condition	L2	C04	PO3
14		Explain the VSWR Double minimum method using microwave bench setup?	L2	C04	PO2
15	a)	Explain the attenuation measurement using microwave bench setup?	L1	C04	PO1
	b)	How is slotted line used for measurement of impedance of an unknown load? Explain.	L2	C04	PO1
16	a)	Show how to measure the frequency of the source without using a wave meter in the microwave test bench? Explain.	L4	C04	PO3
	b)	How VSWR of unknown load is measured with the help of Slotted Wave Carriage using microwave bench setup? Draw the block diagram of the setup.	L5	C04	PO3