

COURSE NAME: Microwave Devices and Antenna Design

MAX.MARKS:25

COURSE CODE: 17B11EC512

MAX.TIME: 1.5 HR.

Note: Carrying of mobile phones during examinations will be treated as a case of unfair means.

Answer all questions. Each question carries five marks.

1. Derive the scattering parameters for a Magic Tee.
2. What are the two different methods to measure frequency as well as attenuation? Explain in detail.
3. Explain how do you measure the unknown load impedance using a standard microwave test bench.
4. What do you mean by impedance matching and explain in detail about LC impedance matching networks.
5. Describe the following briefly.
 - a. Unitary property of scattering matrix.
 - b. Faraday's rotation.
 - c. Application of isolator and Gyrator and their scattering parameters.
 - d. Quarter wave transformer.