Questions

AY 2019-20

1. List various applications of Microwave Frequencies.
2. Derive the expression of following for Rectangular waveguide in TEmn  Mode.

* Cut-off Frequency
* Transmitted Power
* Waveguide Impedance

1. Write applications of Circular and Rectangle waveguide. Also list their advantages and limitations.
2. Explain Applications of Magic Tee to measure unknown impedance.
3. Draw and explain Isolator using Magic Tee
4. Define Cut-off frequency and Degenerate Mode.
5. Draw mode pattern for TE10 and TM11, TE 32 mode of rectangle waveguide.
6. Define Perfect Match
7. Justify why waveguide does not support TEM Mode of Propagation.
8. Derive S-parameters for E-Plane Tee.
9. Derive S-parameters for Directional Coupler along with its applications.
10. Draw and explain Magic Tee as Isolator.
11. Derive the expressions for TM mn mode for rectangle Waveguide of various parameters.
12. Numerical on Single Stub
13. Waveguide Excitation
14. Microwave attenuator
15. Microwave Terminators
16. Write short note on Microwave Resonators