RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2018-2019 (Odd Semester)

Innovative Practices Description

UNIT III Passive and Active Microwave Devices

Degree, Semester& Branch: VII Semester B.E ECE B
Course Code & Title: EC6701 RF and Microwave Engineering
Name of the Faculty member: Mrs.R.Chitra
Name of the Topic: Microwave Devices
Name of the Innovative Practice: Microwave components linked with Laboratory experiments (Demonstration)

Description:

A method demonstration is a teaching method used to communicate an idea with the aid of visuals such as flip charts, posters, power point, etc. A demonstration is the process of teaching someone how to make or do something in a step-by-step process. Demonstration has the potential advantage of being better, more visible, and clearer and with more impact than a class experiment. This gives them the opportunity to develop skills in handling and using equipment, making decisions, collecting data and actively thinking about what they are doing and learning.

In optical and Microwave laboratory, experiments were done on measurement of impedance, frequency, VSWR and Power using microwave devices such as Isolator, Circulator, Directional coupler, slotted line section and VSWR meter. Therefore, I would like to demonstrate the various microwave components which are used in the laboratory and explained theoretical concepts which linked with laboratory experiments.

After this demonstration, students can be acquired better knowledge about various Microwave devices and had a better learning in the classroom.

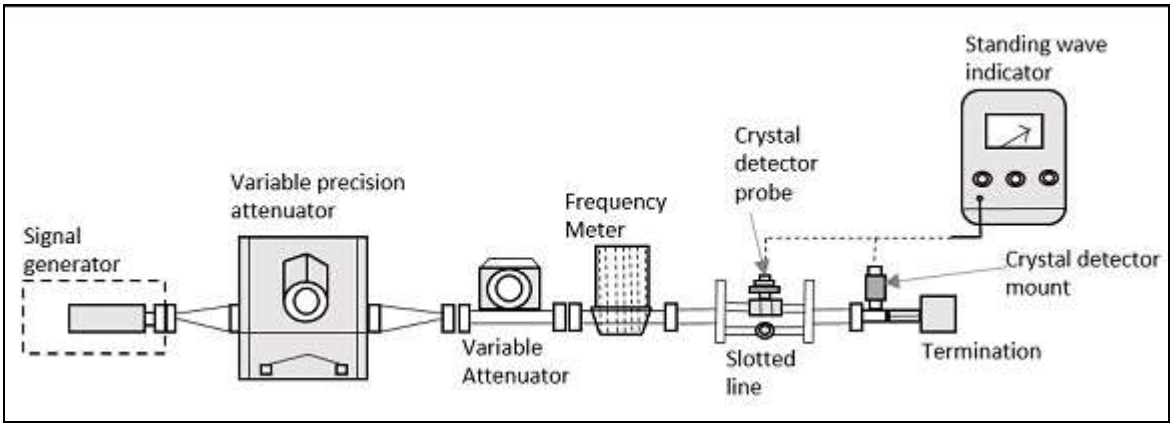

Figure Microwave Bench General Measurement Setup

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO3	2	3	2	3	1			2		1	1	2

CO3: The student will be able to explain the basic concept of various microwave devices

References:

1. https://www.tutorialspoint.com/microwave_engineering/microwave_engineering_measurement_devices.htm
2. Annapurna Das and Sisir K Das, "Microwave Engineering", Tata McGraw Hill Publishing Company Ltd, New Delhi, 2005.