



DEPARTMENT OF MECHANICAL ENGINEERING

ACTIVITY BASED LEARNING

Course Code & Course Title : 19ME408/ METROLOGY AND MEASUREMENTS
 Year/Sem/Branch : III/V/MECHANICAL
 Name of Faculty : N. GNANESWARAN
 Designation : ASSISTANT PROFESSOR
 Unit Title : LINEAR AND ANGULAR MEASUREMENTS
 Topic : LASER INTERFEROMETERS
 LO : Understand the principle of interferometry and the working of Laser interferometer
 Bloom's Taxonomy Level : Understand – K2

S. No.	Title	Description
1	Concept	Concept is to make the students, understand the principle of interference and the working of interferometers
2	Challenges Faced	(Difficulties faced by students while it was taught in conventional method) <ul style="list-style-type: none"> • Almost an entire period is lost to drawing the diagram in chalk on the board • Students found it difficult to visualize the fundamental principle of interference of light when taught orally with sketches on board
3	Name of the Activity	Video
4	Description of the Activity	<ul style="list-style-type: none"> • Introduction about the topic: https://youtu.be/3aiCvOpshEg • Students were instructed to watch the video carefully • Once the video was over, students are then made to attend a short quiz to make them reflect on their learning
5	Feedback from Learners (Consolidated)	https://docs.google.com/spreadsheets/d/1V5VFkVFLoHQZmHLvHGAAZwXGny4jjiorhYM3-FDVjNdc/edit?resourcekey#gid=388780541
6	Feedback of the Faculty about this activity	(Previous experiences Vs Activity Based Teaching) <ul style="list-style-type: none"> • Students were able to readily grasp the concept of interference of light waves • Students were confident in explaining the working of an interferometer once they have watched the video

Analysis Report Chart.

- Above 80% students found case study was interesting

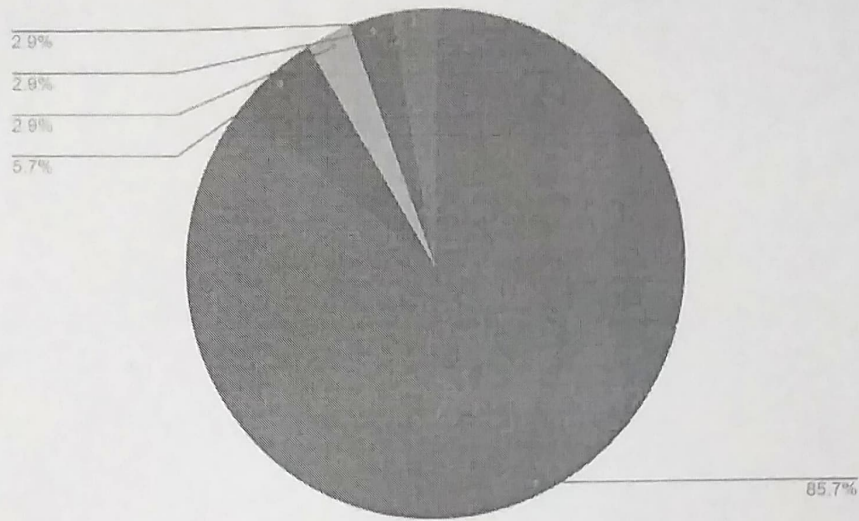


Fig-1: Student ratings for the lecture

N. Hanuman
Signature of the Course Faculty

[Handwritten Signature]
Signature of HOD

Evidences/Proofs (To be attached along with this document)-Mandatory

{Photos taken during activity (or) Documents collected from Students (Charts, Crossword puzzles, Cards etc.,)}

SL. NO	CONTENT	LINK
1	Student Feedback	https://docs.google.com/spreadsheets/d/1V5VFkVFLoHQZmHIAAZwXGny4jiorhYM3-FDVjNdc/edit?resourcekey#gid=3887
2	Online Lecture	https://youtu.be/3aiCvOpshEg