

## INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500043, Telangana

## MECHANICAL ENGINEERING

## ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:

Dr. RIZWANA

Department:

**Mechanical Engineering** 

Regulation:

IARE - R18

Batch:

2019-2023

Course Name:

**Waves and Optics** 

Course Code:

AHSB04

Semester:

I

Target Value:

60% (1.8)

Attainment of COs:

	Course Outcome	Direct attaiment	Indirect attaiment	Overall attaiment	Observation
CO1	Apply the concepts of dual nature of matter and Schrodinger wave equation to a particle enclosed in simple systems.	0.90	2.80	1.3	Not Attained
CO2	Demonstrate the classification of solids and important aspects of semiconductors in terms of carrier concentration and Fermi level.	0.60	2.80	1	Not Attained
CO3	Compare the concepts of LASER and normal light in terms of mechanism and working principles for applications in various fields and scientific practices.	2.00	2.80	2.2	Attained
CO4	Explain functionality of components in optical fiber communication system by using the basics of signal propagation, attenuation and dispersion.	3.00	2.80	3	Attained
CO5	Interpret the phenomenon of interference and diffraction by using the principles of wave motion and superposition.	2.30	2.80	2.4	Attained
C06	Make use of the concept of simple harmonic motion and arrive at expressions for damped, forced harmonic oscillators and wave equations by using necessary mathematical formulations.	0.90	2.80	1.3	Not Attained

Action Taken:

CO1: More assignments are to be given on the application of concepts of the dual nature of matter and the Schrodinger wave equation to a particle enclosed in simple systems.

 $^{\text{part}}_{\text{CO2: More assignments are to be given on the classification of solids and applications of semiconductors}$ 

 $co^2$ . More assignments are to be given on the derivations of damped, forced harmonic oscillators and wave equations.

**Head of the Department** 

Head of the Department Mechanical Engineering INSTITUTE OF AERONAUTICAL ENGINEERING

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