



Expert Lecture Report

Expert Lecture

On “Free and Forced Damped Vibration of a Single Degree of Freedom system”

Objectives:

To cover and understand the basic concepts of mechanical vibrations and how it affects the life of any machine elements.

To understand Free and Forced Damped Vibration of a Single Degree of Freedom System and why damping is necessary.

Expert:

Dr. Mitesh Mungla
Associate Professor
Indus University
Ahmadabad

Vibration Expert Lecture coordinator:

Mr. Jagdish Rana
Assistant Professor
Mechanical Department,
SRPEC, Unjha

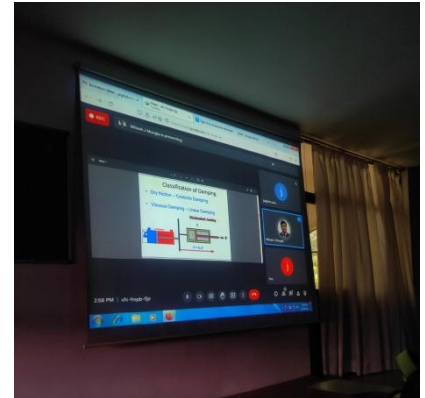
Summary:

Explanation of basic concepts of mechanical vibration and how vibration affects the life of machine elements.

Topics:

1. Introduction of vibration
2. Damped free and force Vibration System
3. Damped system

DETAILS OF MECHANICAL VIBRATION:



Expert lecture was started at 2:00 PM. The lecture was initiated with the topic named “Free and Forced Damped Vibration of a Single Degree of Freedom system” by Dr. Mitesh Mungla taught us very briefly and explained the topic thoroughly. He explained and derives mathematical equations that the amplitude of vibration varies with respect to time in case of free and forced vibration and concludes that the vibrations are not induced in case of over and critically damped system. The vibration only induced only when the system is under damped and also a function of time in case of free damped vibration. In forced vibration constant amplitude of vibration induced and not a function of time.

Feedback from the Students	Excellent	Very good	Good	Inadequate
1.Relevancy of Topics	60%	22%	18%	0%
2.Overall Quality of Contents	56%	34%	10%	0%
3.Duration of Expert Lecture	61%	21%	18%	0%
4. Communication by Faculty	54%	28%	18%	0%

Lecture Participant:

Expert lecture was organized for students of 5th and 7th semester Mechanical Engineering. There were 21 students were present in Expert lecture.