



**Department of Mechanical Engineering
Academic Year 2021 – 2022 (Odd Semester)**

Degree, Semester & Branch: V Semester B.E. Mechanical Engineering

Course Code & Title: ME8594 Dynamics of Machines

Name of the Faculty member (s): Dr.J.Jabinth, AP/Mechanical

Innovative Practice Description

- **Unit / Topic: Unit II / Balancing of Rotating Masses, Single Degrees of Freedom**
- **Course Outcome: CO2, CO3**
- **Date: 21.10.2021**
- **Topic Learning Outcome: TLO6, TLO4**
- **Activity Chosen: Theory to Practice**
- **Justification:** Balancing of Rotating masses, single degree of freedom are learnt as theory in their subjects, so in order to give a practical exposure students are taken to Dynamics laboratory to show the experimental setup.
- **Time Allotted for the Activity: 15 minutes**
- **Details of the Implementation:** In order to gain a practical exposure in the topics like Balancing of Rotating masses, and Single degree of freedom students have been taken to lab to demonstrate the working in real time. The working principle already learnt by students in the class were recalled during the session.
- **CO – PO / PSO mapping:**

PO	PO1	PO2	PO12	PSO2
CO5	3	2	3	2

(1 – Low 2 – Moderate 3 – High)

- **PO / PSO mapped:**

Innovative practice	PO1	PO2	PO12	PSO4
	3	2	3	2
Justification for correlation	Students must have fundamental knowledge in the topics learnt in subject	Students will be able to understand the unbalancing problem, SDOF and its consequence of vibration.	Students can learn more like balancing of reciprocating engines, Multi Degree of Freedom etc.	Provides manufacturing solution while manufacturing a component.



Screenshot of the practice:



• Reflective Critique:

❖ *Feedback of practice from students and other stakeholders:*

Based on the feedback received from students, the students told this method of teaching made them to understand the topic more clearly.

❖ *Benefit of the practice:* (E.g.: Outcome attainment would have increased due to innovative practice over conventional practice)

Students will gain real time experience and they can feel the problem and find solution for the same instantly.

❖ *Challenges faced in implementation:*

- Bringing students to lab from class.
- Teaching for the entire class with limited time.

References:

- ❖ Khurmi, R.S., “Theory of Machines” 14th edition, S chand publications 2005.
- ❖ Rattan, S.S, “Theory of Machines”, 4th Edition, Tata McGraw-Hill, 2014.

Signature of Faculty Member

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