RAMCO INSTITUTE OF TECHNOLOGY

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Department of Civil Engineering
Academic Year 2023– 2024 (Even Semester)

Degree, Semester & Branch: IV Semester B.E. Civil Engineering
Course Code & Title: CE3403 – Concrete Technology
Name of the Faculty member (s): Dr.G.Karthikeyan

Innovative Practice Description

- **Unit / Topic: Unit IV** / Fresh and Hardened Properties of Concrete
- **Course Outcome:** CO4
- **Topic Learning Outcome:** TLO11
- **Activity Chosen: Experimental learning**
- **Justification:**

  By engaging students in hands-on experiences and reflection, they are better able to connect theories and knowledge learned in the classroom to real-world situations. Demonstrated to the students about to finding the compressive strength of concrete using Rebound hammer (NDT equipment) apparatus and compression testing equipment.

- **Time Allotted for the Activity:** 30 minutes

- **Details of the Implementation:**
  Dr.G.Karthikeyan, ASP/Civil delivered his speech on the topic "NDT Test and Compressive Strength of Concrete" in the Construction materials laboratory. In addition, He explained about field and laboratory testing for assess the compressive strength of concrete.

- **CO – PO / PSO mapping:**

CO	PO1	PO2	PO11	PSO1	PSO3
CO1	3	2	2	1	1

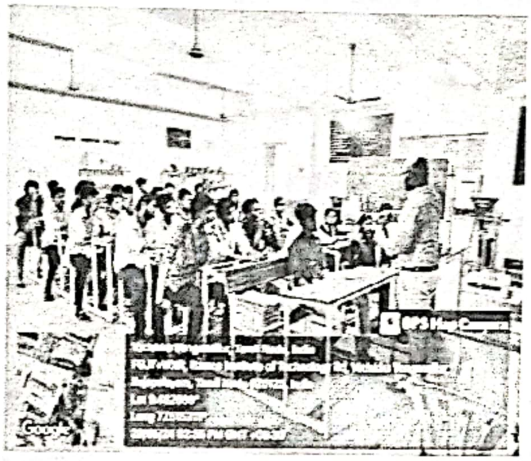
(1 – Low 2 – Moderate 3 – High)

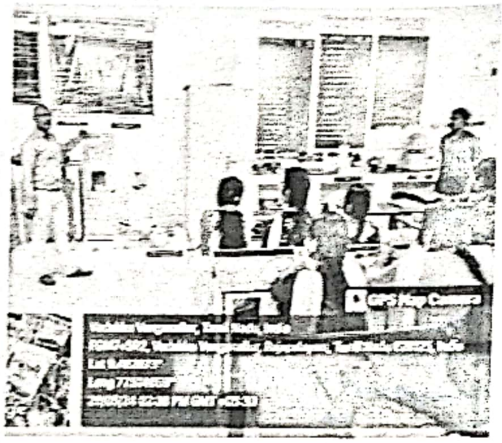
- **PO / PSO mapped:**

Innovative practice	PO1	PO2	PSO1	PSO3
Justification for correlation	Apply fundamental knowledge	Using the principles of Engineering	Present the data related to Quality control	Provide sustainable solutions

	in construction materials	mathematics, students will be able to analyze the properties of cement		

- **Images / Screenshot of the practice:**





- **Reflective Critique:**
  - ❖ ***Feedback of practice from students and other stakeholders:***
    The students felt easy to understand, and recollect the concepts involved in the given topic which will make them interest to study this subject and perform well in the continuous assessment test.

    Benefit of the practice: (E.g.: Outcome attainment would have increased due to innovative practice over conventional practice)
    - Experimental learning is more effective to understand the subject easily.
    - Students can refer the manual whenever they interested to learn the topic.

  - ❖ ***Challenges faced in implementation:***
    More no. of students are unable interact with the expert during the session due to time restriction.

References:

- ❖ IS10262-2009 Recommended Guidelines for Concrete Mix Design, Bureau of Indian Standards, New Delhi, 1998.
- ❖ Santhakumar. A.R., "Concrete Technology", Oxford University Press India, 2006.

Signature of Faculty Member **HOD**