Department of Civil Engineering

Academic Year 2021– 2022 (Odd Semester)

Degree, Semester & Branch: IV semester B.E Civil Engineering

Course Code & Title: EN8591 & Municipal Solid Waste Management

Name of the Faculty member (s): Mrs.A.Leema Margret

Innovative Practice Description

Unit / Topic: Unit II / Source Reduction, Waste Storage and Recycling

- **Course Outcome:** CO2
- **Topic Learning Outcome:** TLO9
- **Activity Chosen: Recycle Relay**
- **Justification:**

  Recycle relay gives the clear idea about types of recyclable, non-recyclable and compostable items. This activity answers the questions like What defines an item that can be composted? What defines an item that can be recycled? What constitutes non-recyclable? In order to make the students more attentive recycle relay activity was planned.
- **Time Allotted for the Activity:** 20 minutes
- **Details of the Implementation:**

i. Names of Recyclable, Compostable and Non-recyclable items written in paper, 2 large sacks for putting items in, 2 recyclable bins, 2 non-recyclable bins, 2 compost bins are the materials which has been prepared before the event.

ii. Students are asked to fill each sack with various recyclable, non-recyclable and compost items. On one end of a classroom, a set of recyclable, non-recyclable and compostable bins are arranged in one corner and the other set in the other corner. At the other end of the classroom, two sacks are placed directly across from each set of bins.

iii. Then students are divided into 2 teams [Team A and Team B]. Each team has been given a sack that has various recyclable, non-recyclable and compostable items to be put in the bins at the far end.

iv. Students are instructed to work in relay teams to see which group can sort out the materials in their sacks more successfully.

v. After each team has finished, the sorted materials are checked to see whether they are correctly sorted or not.

vi. If they put items in the wrong bin, questions have been asked that why they think the item belongs in that bin.

vii. Finally the team B with the most items sorted correctly won this recycle relay.

- **CO – PO / PSO mapping:**

CO	PO6	PO7	PSO3
CO2	2	2	2

(1 – Low 2 – Moderate 3 – High)

- **PO / PSO mapped:**

Innovative practice	PO6	PO7	PSO3
Justification for correlation	Apply 3R principle globally so as to build a good society through the effective use of resources and materials	Demonstrate the knowledge gained in on-site processing which is the most effective and sustainable way to achieve resource recovery	Students are provided with enough knowledge to give sustainable solutions for waste reduction, storage and recycling.

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

- **Reflective Critique:**
  - ***Feedback of practice from students and other stakeholders:***
    The students felt easy to remember and recollect the concepts related to on-site processing of waste which will make them to attend the questions under this topic in Internal Assessment Test and also it helps to acquire knowledge on recycling of solid wastes for sustainable environment.
  - ***Benefit of the practice:*** (E.g.: Outcome attainment would have increased due to innovative practice over conventional practice)
    - This activity helped the students to quickly recap the important fundamental knowledge about recycling methodology and on site processing of wastes.
    - The students got a clear idea about this topic and they felt it was useful and they were eagerly participated.
  - ***Challenges faced in implementation:***
    There was a time lapse as students took some more time to sort out the recyclable, non-recyclable and compostable items.

References:

- **https://nptel.ac.in/courses/120/108/120108005/**