

## **CIE: Internal Assessment Details**

### **Internal Assessment Test – 1**

**Department of Mechanical Engineering**

**Program: B. E. in Mechanical Engineering**

Term:	<b>Sept 2022- Dec 2022</b>	Course Code:	<b>MEOE03</b>
Course:	<b>Sustainable Waste Management Techniques</b>	Semester:	<b>V</b>
CIE:	<b>Test – 1</b>	Max Marks:	<b>30</b>

### **Syllabus**

#### **UNIT I**

Municipal solid waste management—Introduction, types of wastes, and sources, composition, generation rate, collection of waste, separation, transfer and transport, treatment and disposal options. Special emphasis on a) single-use plastics 2) e-waste 3) urban mining.

#### **UNIT II**

Sustainability-Introduction, 10 reasons for business to become sustainable. Waste defined, typical forms of waste. Biases towards waste. 4-steps to achieve sustainability as an objective. Stahel's ratio of manpower to energy use in production and closed-loop material recovery. Life extension -beginning with waste elimination. Managing the change. Saving waste. Micro- power generation. 10 ways to minimize product waste. Minimizing packages. Reuse, Repair, Remanufacture and Recycle.