



# Vidyavardhini's College of Engineering and Technology, Vasai (West)

## First Year Engineering

Academic Year: 2024-2025

### Problem Set 5: Temperature and its measurements

Subject: BSC2023/EP

Date: 17/03/2025

Max Marks: 10

Submission Deadline: 28-03-2025

**CO5:** To build a foundation for temperature measurements required in the field of technology.

Q. No.	Questions	Marks	CO	CL
1	Define heat and temperature. Explain different methods of heat transfer with one example for each.	2	5	2
2	Create a comparison table for the following thermometers: Bimetallic, Platinum Resistance (PT-100), and Thermoelectric.	3	5	3
3	Write short notes on the factors influencing the selection of a thermometer based on temperature range and specific applications.	3	5	2
4	Explain the calibration process of a PT-100 thermometer for temperature measurement.	2	5	2

*NB: Software is like entropy. It is difficult to grasp, weighs nothing, and obeys the second law of thermodynamics; i.e. it always increases.*

– N. R. Augustine