

Thermometry

Objective of the course:

This Course will introduce the students to the world of heat and thermodynamics & the behavior of the physical system at different thermodynamically conditions. After completing this course students will understand the difference in type of thermometers and relation between them. To have students see and understand that a thermometer is a device that use to measure a change in temperature.

Outcomes:

The thermometer is an easy yet important to that can be used to detect changes in the temperature.

Opportunity:

Some of the key factors propelling the market growth are growing demand for temperature monitoring devices. Health care expenses & rising health care awareness.

Fees:

Unpaid Course

Certificate details:

Certificate courses will be given to the students by the Department of Physics, TTWRDC, W, and Medak

Course Content:

- 1) Concept of heat and temperature, Type of thermometers, Centigrade and Fahrenheit relation, Celsius Kelvin, Fahrenheit and Rankine Scales of temperature,
- 2) Platinum resistance thermometer, Seebeck effect, problems, liquid thermometers.
- 3) Advantages of gas thermometers, Comparison of different thermometers, Low and high temperature measurements.

Books Recommended:

- 1) Heat and Thermodynamics: Brijlan N.Subramanyam Sulthan Chand & Company Ltd.
- 2) Heat and Thermodynamics: D.S.Mathur Sulthan Chand & Company Ltd

Which among the following is a poor conductor of heat?

- a) Copper b) Aluminium c) Mercury d) More than one of the above

If we convert 287 K to Celsius Scale, we will get ;

- a) 18°C b) 14°C c) 24°C d) More than one of the above