



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Physical Science

Class: 8

Date: 22.02.21

Duration: 40 min

Worksheet Solution 12

Full Marks: 15

HEAT/ THERMAL EXPANSION OF SOLIDS

Choose the Correct options:

- Space between molecules of a substance is called
Ans (a) **Intermolecular spaces** (b) Intermolecular void (c) Vacuum (d) Interstitial cells
- Expansion of a solid is of the following types
Ans (a) Linear (b) Superficial (c) Cubical (d) **All of these**
- Linear expansion can be observed in a
Ans (a) **Iron rod** (b) Steel plate (c) Copper block (d) Rubber balloon
- In linear expansion, the expansion in breadth and width is
Ans (a) Infinite (b) **Infinitesimal** (c) Irrelevant (d) Unknown
- The linear expansion of solid depends on the following
Ans (a) Original length (b) Material (c) Temperature Change (d) **All of these**
- Which of the following expands the most?
Ans (a) Copper (b) Iron (c) **Aluminium** (d) Brass
- Coefficient of linear expansion depends on
Ans (a) Original length (b) Material (c) Temperature Change (d) **All of these**
- The SI unit of linear expansion is
Ans (a) **per kelvin** (b) per $^{\circ}\text{C}$ (c) per $^{\circ}\text{F}$ (d) per calorie
- Superficial expansion can be observed in a
Ans (a) Glass rod (b) **Copper plate** (c) Wooden block (d) Water bubble
- In Superficial expansion, the expansion in width is
Ans (a) Infinite (b) **Infinitesimal** (c) Irrelevant (d) Unknown
- The Superficial expansion of solid depends on the following
Ans (a) Original Area (b) Material (c) Temperature Change (d) **All of these**
- Coefficient of Superficial expansion depends on
Ans (a) Original Area (b) Material (c) **Temperature Change** (d) All of these
- The Cubical expansion of solid depends on the following
Ans (a) Original Volume (b) Material (c) Temperature Change (d) **All of these**
- Coefficient of Cubical expansion depends on
Ans (a) Original Volume (b) Material (c) **Temperature Change** (d) All of these
- Coefficient of linear, superficial and cubical expansion of a substance give the ratio
Ans (a) **1:2:3** (b) 3:2:1 (c) 1:3:2 (d) 2:3:1