ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

Sub: Physical Science **Class: 8** **Date: 22.02.21**

Duration: 40 min **Worksheet 12** **Full Marks: 15**

HEAT/ THERMAL EXPANSION OF SOLIDS

Choose the Correct options:

1. Space between molecules of a substance is called

Ans (a)Intermolecular spaces (b)Intermolecular void (c)Vacuum (d) Interstitial cells

2. Expansion of a solid is of the following types

Ans (a)Linear (b)Superficial (c)Cubical (d) All of these

3. Linear expansion can be observed in a

Ans (a) Iron rod (b) Steel plate (c) Copper block (d) Rubber balloon

4. In linear expansion, the expansion in breadth and width is

Ans (a) Infinite (b) Infinitesimal (c) Irrelevant (d) Unknown

5. The linear expansion of solid depends on the following

Ans (a)Original length (b) Material (c) Temperature Change (d) All of these

6. Which of the following expands the most?

Ans (a) Copper (b) Iron (c) Aluminium (d) Brass

7. Coefficient of linear expansion depends on

Ans (a)Original length (b) Material (c) Temperature Change (d) All of these

8. The SI unit of linear expansion is

Ans (a) per kelvin (b) per ^{o}C (c) per ^{o}F (d) per calorie

9. Superficial expansion can be observed in a

Ans (a) Glass rod (b) Copper plate (c) Wooden block (d) Water bubble

10. In Superficial expansion, the expansion in width is

Ans (a) Infinite (b) Infinitesimal (c) Irrelevant (d) Unknown

11. The Superficial expansion of solid depends on the following

Ans (a)Original Area (b) Material (c) Temperature Change (d) All of these

12. Coefficient of Superficial expansion depends on

Ans (a)Original Area (b) Material (c) Temperature Change (d) All of these

13. The Cubical expansion of solid depends on the following

Ans (a)Original Volume (b) Material (c) Temperature Change (d) All of these

14. Coefficient of Cubical expansion depends on

Ans (a)Original Volume (b) Material (c) Temperature Change (d) All of these

15. 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