ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

Sub: Physical Science **Class: 8** **Date: 14.04.20**

Duration: 40 min **Worksheet Solutions 7** **Full Marks: 15**

HEAT/ THERMAL EXPANSION OF LIQUIDS AND GASES

Choose the Correct options:

1. The only expansion that takes place in a general liquid is

Ans (a)Linear (b)Superficial **(c)Cubical** (d)Anomalous

2. Compared to solids, for the same rise in temperature, liquids expand

Ans **(a)more** (b)less (c)equally (d) none

3. Water shows anomalous behaviour between

Ans **(a) 0 and 4 ^oC** (b) 10 and 14 ^oC (c) 14.5 and 15.5 ^oC (d) 0 and -4 ^oC

4. Which of the following expands the most

Ans (a) Water (b) paraffin **(c) benzene** (d) alcohol

5. The expansion of liquid observed in an experiment includes

Ans **(a)The expansion of the containing vessel** (b) Conduction (c) Temperature Change (d) All of these

6. Compared to the observed expansion in a liquid, the actual expansion is

Ans **(a)more** (b)less (c)equally (d) none

7. Which of the following expands the most

Ans (a) Hydrogen (b) Oxygen (c) Nitrogen **(d) All expand equally**

8. Compared to liquids gases expand

Ans **(a)more** (b)less (c)equally (d) none

9. Anomalous expansion of water leads to

Ans **(a) Floating of iceberg** (b) Formation of snow (c) Melting of ice (d) None of these

10. When a chapatti is heated it swells because of thermal expansion of

Ans (a) solid (b) liquid **(c) gas** (d) Both (a) and (c)

11. Water is cooled from 4 ^oC to 0 ^oC. It shows

Ans **(a)Expansion** (b) Contraction (c) Cavitation (d) Crystallization

12. Water expands when heated above

Ans (a) -4 ^oC (b) 0 ^oC **(c) 4 ^oC** (d) 14.5 ^oC

13. Rise of liquid level of a container on heating depends on

Ans (a)Container material (b) Liquid (c) Temperature Change **(d) All of these**

14. What is the order of magnitude of expansion of liquid

Ans (a)$10^{-6}\ ^oC^{-1}$ **(b) $10^{-4}\ ^oC^{-1}$** (c) $10^{-5}\ ^oC^{-1}$ (d) $10^{-2}\ ^oC^{-1}$

15. The coefficient of thermal expansion of all gases is

Ans **(a)same** (b) different (c) variable (d) None of these