ONE TWO ACADEMY

STD 10 SCIENCE

Thermal Physics

Total:- 25 marks **Time:- 45 minutes**

Answer the following questions: **4 x 1 = 4**

1. The value of Avogadro's number _____.
2. What is the relation between Celsius and Kelvin?
3. Why do electrical wires stretch and sag during summer ?
4. What is the SI unit of Heat energy ?

Answer any three of the following questions:- **3 x 2 = 6**

5. Mention the characteristics of heat energy transfer.
6. Define one calorie.
7. If you keep ice at 0^oC and water at 0^oC on either of your hands, in which hand you will feel more chillness? Why?
8. Distinguish real and ideal gas.

Answer any two of the following questions:- **2 x 4 = 8**

10. State the fundamental laws of gases.
11. Keeping the temperature as constant. A gas is compressed four times of its Intial pressure. The volume of gas in the container changing from 20 cc (V1 cc) to V2 cc. Find the final Volume V2.
12. a) Define the coefficient of real expansion.
    b) Define the coefficient of apparent expansion

Answer any one of the following questions:- **1 x 7 = 7**

13. Derive ideal gas equation.
14. Explain the experiment of measuring the real and apparent expansion of a liquid with a neat diagram.

All the Best | One Two Katral maiyam