0KALPAVRUKSHA MODEL SCHOOL

Answers of Assignment-1

Class: VII **Sub: Physics** **Date: 19.7.2021**

Topic: TEMPERATURE AND HEAT

I. Answer the following questions:

1. Define temperature.
ANS: The degree of hotness or coldness of a body is called temperature.

2. Define the thermometer.
ANS: A device used to measure temperature is called a thermometer.

3. Heat and temperature are two different things, but they are very closely related to each other. Write how?
ANS: Heat and temperature are two very different things, but they are very closely related to each other. Temperature is the hotness or coolness of the body and heat can be transferred when there is a difference in temperature.

4. Name the device which is used to measure temperature.
ANS: Thermometer is the device used to measure temperature.

5. Write any three hot and cold objects from our daily life.
ANS: Hot objects: Hot coffee, hot tea and hot water
Cold objects: ice cream, cold juice, cold drinks.

6. State the range of a laboratory thermometer.
ANS: The range of temperature in a laboratory thermometer is -10 ºC to 110 ºC.

7. Write one difference between hot and cold objects.
ANS:

Hot object	Cold object
The objects are those which have high energy atoms that move with a very fast energy.	The objects are those which have low energy atoms that moves with low speed.

1. On the cold winter day, the temperature was 23°F.What would this temperature be in degrees Celsius?

Soln: the temperature in Fahrenheit Is=23°F

The temperature in Celsius=?

$$C=\frac{5\,(F-32)}{9}$$

$$=\frac{5(23-32)}{9}$$

$$=\frac{5\times(-9)}{9}=(-5)$$

23°F= -5°C

2. On the top of the mountain, water boils at 95°C .Express this temperature on the Fahrenheit scale.

Solution: the temperature in Celsius=95°C

The temperature in Fahrenheit= ?

$$F=\left(C\times\frac{9}{5}\right)+32$$

$$=\left(95\times\frac{9}{5}\right)+32$$

$$=(19\times9)+32$$

$$=171+32=203$$

95°C=203°F