



INDIAN SCHOOL AL WADI AL KABIR



CLASS: VII	DEPARTMENT: SCIENCE 2024 - 2025	DATE: 06/05/2024
TEXTBOOK Q & A	TOPIC: HEAT	NOTE: A4 FILE FORMAT
NAME OF THE STUDENT:	CLASS & SEC:	ROLL NO.

1. State similarities and differences between the laboratory thermometer and the clinical thermometer.

Ans: SIMILARITIES:

- i) Both thermometers consist of long narrow uniform glass tubes.
- ii) Both have a bulb at one end with mercury.
- iii) Both use the Celsius scale on the glass tube.

DIFFERENCES:

LABORATORY THERMOMETER	CLINICAL THERMOMETER
i) The range of a laboratory thermometer is generally from -10°C to 110°C	i) The range of a clinical thermometer is from 35°C to 42°C
ii) Kink is absent	ii) Kink is present
iii) It is used for measuring the temperature of other objects	iii) It is used only for measuring human body temperature

2. Give two examples each of conductors and insulators of heat.

Ans: Conductors of heat: i) Aluminium ii) Iron

Insulators of heat: i) Wood ii) Plastic

3. Fill in the blanks:

- a) The hotness of an object is determined by its ----- . [temperature]
- b) Temperature of boiling water cannot be measured by a ----- thermometer. [Clinical]
- c) Temperature is measured in degree ----- . [Celsius]

- d) No medium is required for the transfer of heat by the process of ----- . **[Radiation]**
- e) A cold steel spoon is dipped in a cup of hot milk. It transfers heat to its other end by the process of ----- . **[Conduction]**
- f) Clothes of ----- colours absorb heat better than clothes of light colours. **[Dark]**

4. Match the following:

(i) Land breeze blows during	a) Summer
(ii) Sea breeze blows during	b) Winter
(iii) Dark-coloured clothes are preferred during	c) The day
(iv) Light-coloured clothes are preferred during	d) Night

Ans:

(i) Land breeze blows during	d) Night
(ii) Sea breeze blows during	c) The day
(iii) Dark-coloured clothes are preferred during	b) Winter
(iv) Light-coloured clothes are preferred during	a) Summer

5. Discuss why wearing more layers of clothing during winter keeps us warmer than wearing just one thick piece of clothing.

Ans: More layers of clothing keep us warm in winter as they have a lot of space between them. This space gets filled up with air. As air is a bad conductor, it does not allow the body heat to escape.

6. Look at the Figure. Mark where the heat is being transferred by conduction, by convection and by radiation.



11. Stainless steel pans are usually provided with copper bottoms. The reason for this could be that:

- a) the copper bottom makes the pan more durable.
- b) such pans appear colourful.
- c) copper is a better conductor of heat than stainless steel.
- d) copper is easier to clean than stainless steel.

Ans: (c) copper is a better conductor of heat than stainless steel.

<i>Prepared by</i> <i>Mr Vikrant Purandare</i>	<i>Checked by</i> <i>HoD Science</i>
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