CLASS VII – SCIENCE – CHAPTER 04

HEAT

Name: Date:

Q01. The heat in metals is conducted by the process of

(a). Radiation (b). Convection (c). Conduction (d). Absorption

Q02. Glass, plastic, wood are examples of

(a). Conductor (b). Insulator (c). Convectors (d). Radiators

Q03. Temperature is measured with the help of

(a). Thermometer (b). Barometer (c). Ammeter (d). Voltmeter

Q04. Heat gets transferred by the

(a). Conduction (b). Convection (c). Radiation (d). All of these.

Q05. Heat is a form

(a). Temperature (b). Energy (c). Power (d). Work

Q06. 10^0C is equal to

(a). 173 K (b). 273 K (c). 283 K (d). 183 K

Q07. Thermos flask keeps hot liquid hot and cold liquid cold by

(a). Cooling (b). Heating (c). Preventing heat loss (d). Using coolant

Q08. Heat of sun reaches to earth by

(a). Conduction (b). Convection (c). Radiation (d). Through air.

Q09. Clinical thermometer has marking from 35^0C to

(a). 32^0C (b). 42^0C (c). 52^0C (d). 62^0C

Q10. Conduction takes place in

(a). Solid only (b). Liquid only (c). Gases only (d). All of the above.

Q11. Method of heat transfer in steel rod is

(a). Conduction (b). Convection (c). Radiation (d). All of these

Q12. Which of the following is a insulator

(a). Copper rod (b). Aluminium rod (c). Air (d). Graphite

Q13. A wooden spoon is dipped in cup of ice-cream, its other end

(a). Become cold by conduction (b). Become cold by convection

(c). Become cold by radiation (d). Does not become cold.

Q14. The bottom of stainless steel pan have copper because

(a). Copper is more durable

(b). Copper is more attractive

(c). Copper is better conductor

(d). Copper is easier to clean.

Q15. During the night

(a). Land cools more quickly than the sea

(b). Sea cools quickly than the land

(c). Land heats up

(d). Sea water heats up

Q16. Ventilation in room is due to

(a). Conduction (b). Convection (c). Radiation (d). Both (a) and (c)

Q01. Match the following

Column A	**Column B**
(a). Heat	i. Good conductor
(b). Temperature	ii. Sea breeze
(c). Radiation	iii. Form of energy
(d). Convection	iv. degree of hotness
(e). Metals	v. Sun's energy

Column A	**Column B**
(a). Sea breeze	i. Insulator
(b). Land breeze	ii. From sea to land
(c). Light colour	iii. From land to sea
(d). Glass	iv. Direct molecular contact
(e). Conduction	v. Summer

Column A	**Column B**
(a). Clinical thermometer	i. Maintain the temperature hot or cold
(b). Laboratory thermometer	ii. Absorbs light
(c). Thermos flask	iii. Smoke moves upward
(d). Chimney	iv. Have kink
(e). Black colour	v. Without kink.

Column A	Column B
(a). Boiling point of water	i. 273 K
(b). Freezing point of water	ii. 27^0C
(c). Normal body temperature	iii. 100^0C
(d). 300 K =	iv. 0^0C
(e). 0^0 C =	v. 37^0C

Q02. Fill in the blanks.

(a). Water and air are _____conductor of heat.

(b). _____ is the liquid used in thermometer.

(c). _____ is the degree of hotness of the body.

(d). Liquid and gases transfer heat by _____ method.

(e). Metals are _____ conductor of heat.

(f). S.I unit of heat is _____.

(g). Heat is a form of _____.

(h). Mercury level falls easily in a _____ thermometer.

(i). Cooking vessels should be made up of _____ conductor.

(j). Range of clinical thermometer is from _____˚C to _____˚C.

Q03. Write T for true and F for false statement.

(a). The boiling point of water is 100^0C.

(b). Light coloured clothes are better absorbers of heat.

(c). Heat of Sun reaches to earth by convection.

(d). Heat is a form of energy.

(e). Substances that do not conduct heat are known as insulators.

(f). S.I unit of temperature is joule.

(g). Kink is present in clinical thermometer.

(h). Mercury is used in thermometer as it expands uniformly.

(i). Convection is the fastest mode of heat transfer.

(j). 100^0C is equal to 373 K.

Q04. Why people advised to wear white clothes in summer?

Q05. What is boiling point? What is the boiling point of pure water?

Q06. What is land breeze? How it keeps the land cool during the day?

Q07. Why do we feel cold when our body sweats?

Q08. Write difference between laboratory and clinical thermometer?

Q09. How thermos flask keeps the liquids hot or cold?

Q10. What is radiation? Give an example of heat transfer through radiation.

Q11. Why metals are good conductor of heat?

Q12. Why is the handle of a metallic kettle covered with strips of cane?

Q13. What is convection? How heat is transferred by this method?

Q14. Why is mercury used in thermometers?

Q15. What is heat? How heat is different from temperature?

Q16. Classify the following as conductors and insulators:

Glass, Iron, Aluminium, Air, Water, Woollens cloth, Silver, Paper.

Q17. Mention the type of heat transfer in following:

(a). Heating of water

(b). Reaching of Solar energy to earth

(c). Heating of iron rod

(d). Sea breeze in coastal area

(e). Cooking of food in utensils.

Q18. Name the following

(a). Fastest mode of transfer of heat.

(b). Mode of transfer of heat where no medium is required.

(c). The metal used in the bulb of thermometer.

(d). Mode of transfer of heat where the medium does not get heated.

Q19. Answer the following:

(a). Which material has the highest melting point?

(b). Which material has the lowest melting point?

(c). What is the temperature range of laboratory thermometer?

(d). What is temperature?