



KINETICS

We Nurture The Future

IIT-JEE | Medical | Foundations

Heat

Question 1.

Heat in liquid travels from the:

- (a) bottom to top
- (b) top to bottom
- (c) right to left
- (d) left to right

▼ [Answer](#)

- (a) bottom to top

Heat in liquid travels from bottom to top.

Question 2.

Heat transferred into solids by:

- (a) conduction
- (b) convection
- (c) radiation
- (d) insulators

▼ [Answer](#)

- (a) conduction

Heat transferred into solids by conduction.

Question 3.

The substances which conduct heat easily are called:

- (a) convection
- (b) radiation
- (c) conductors
- (d) none of these

▼ [Answer](#)

- (c) conductors

The substances which conduct heat easily is called conductor.

Question 4.

In which process heat is transferred from hotter end to colder end is known as:

- (a) conduction
- (b) convection
- (c) radiation
- (d) none of these

▼ [Answer](#)

- (a) conduction

Heat is transferred from hotter end to colder end is known as conduction.

Question 5.

The substances which do not conduct heat easily are called:

- (a) insulators
- (b) convection
- (c) conductors
- (d) none of these

▼ [Answer](#)

- (a) insulators

Insulators do not conduct heat easily.

Question 6.

In which process the liquid itself moves and carries the heat from one place to another ?

- (a) radiation
- (b) conductors
- (c) convection
- (d) none of these

▼ [Answer](#)

- (c) convection

In convection liquid itself moves and carries the heat from one place to another.

Question 7.

The correct method of reading a clinical thermometer is:

- (a) holding the thermometer by bulb
- (b) before use the mercury level should be below 39°C
- (c) don't hold the thermometer by bulb
- (d) none of these

▼ [Answer](#)

- (c) don't hold the thermometer by bulb

Don't hold the thermometer by the bulb while reading it.

Question 8.

The normal temperature of human body is:

- (a) 47°C
- (b) 36°C
- (c) 37°C
- (d) 39°C

▼ [Answer](#)

- (c) 37°C

The normal temperature of human body is 37°C.

Question 9.

Which currents are formed in all liquid on heating ?

- (a) radiation current
- (b) conduction current
- (c) convection current
- (d) none of these

▼ [Answer](#)

(c) convection current

Convection currents are formed in all liquid on heating.

Question 10.

The hand which is over the flame feels hotter because hot air moves in:

- (a) downward direction
- (b) upward direction
- (c) circular direction
- (d) none of these

▼ [Answer](#)

(b) upward direction

The hand feels hotter because air moves upward direction.

Question 11.

Which thermometer is used to measure temperature of different things and places ?

- (a) Laboratory thermometer
- (b) Clinical thermometer
- (c) Minimum and maximum thermometer
- (d) None of these

▼ [Answer](#)

(a) Laboratory thermometer

Laboratory thermometer measure the temperature of things and places.

Question 12.

The range of laboratory thermometer is:

- (a) 70°C to 110°C
- (b) -10°C to 110°C
- (c) 20°C to 110°C
- (d) None of these

▼ [Answer](#)

(b) -10°C to 110°C

-10°C to 110°C is the range of laboratory thermometer.

Question 13.

Which scale is used in clinical thermometer nowadays ?

- (a) Celsius scale
- (b) Fahrenheit scale
- (c) Both (a) and (b)
- (d) None of these

▼ [Answer](#)

(a) Celsius scale
Celsius scale is used in clinical thermometer nowadays.

Question 14.

Which scale was used in clinical thermometer during earlier times?

- (a) Celsius scale
- (b) Fahrenheit scale
- (c) Both (a) and (b)
- (d) None of these

▼ [Answer](#)

(b) Fahrenheit scale
Fahrenheit scale was used in clinical thermometer during earlier time.

Question 15.

Which thermometer records the highest and lowest temperature during a period of time ?

- (a) Clinical thermometer
- (b) Laboratory thermometer
- (c) Minimum and maximum thermometer
- (d) None of these

▼ [Answer](#)

(c) Minimum and maximum thermometer
Minimum and maximum thermometer records temperature of time.

Question 16.

A thermometer which does not use mercury is known as:

- (a) clinical thermometer
- (b) laboratory thermometer
- (c) digital thermometer
- (d) none of these

▼ [Answer](#)

(c) digital thermometer
Digital thermometer does not use mercury.

Question 17.

The scale used with the laboratory thermometer is Celsius scale, indicated by:

- (a) °F
- (b) °C

- (c) K
- (d) None of these

▼ [Answer](#)

(c) K
Celcius scale is indicated by °C.

Question 18.

One litre of water at 30°C is mixed with one litre of water at 50°C. The temperature of mixture will be:

- (a) 80°C
- (b) More than 50°C but less than 80°C
- (c) 20°C
- (d) Between 30°C and 50°C

▼ [Answer](#)

(d) Between 30°C and 50°C
Between 30°C and 50°C because temperature of mixture will be between.

Question 19.

An iron ball at 40°C is dropped in a mug containing water at 40°C. The heat will:

- (a) flow from iron ball to water
- (b) not flow from iron ball to water or from water to iron ball
- (c) flow from water to iron ball
- (d) increase the temperature of both

▼ [Answer](#)

(b) not flow from iron ball to water or from water to iron ball
The heat will not flow from iron ball to water or from water to ball.

Question 20.

A wooden spoon is dipped in a cup of ice-cream its other end:

- (a) becomes cold by the process of convection
- (b) becomes cold by the process of conduction
- (c) becomes cold by the process of radiation
- (d) does not become cold

▼ [Answer](#)

(d) does not become cold
Its other end does not become cold.

Question 21.

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

- (a) copper bottom makes the pan more durable
- (b) such pans appear colourful

- (c) copper is easier to clean than stainless steel
- (d) copper is a better conductor of heat than the stainless steel

▼ [Answer](#)

(d) copper is a better conductor of heat than the stainless steel
Copper is a better conductor of heat than the stainless steel.

Question 22.

The process by which we get heat while sitting in front of a room heater is :

- (a) conduction
- (b) convection
- (c) radiation
- (d) none of these

▼ [Answer](#)

(c) radiation
The process by which we get heat is radiation.

Question 23.

To measure the temperature of an object, we use:

- (a) Barometer
- (b) Lactometer
- (c) Thermometer
- (d) None of these

▼ [Answer](#)

(c) Thermometer
Thermometer is used to measure the temperature of an object.

Question 24.

Which of the following substance is a bad conductor of heat ?

- (a) Steel
- (b) Gold
- (c) Wood
- (d) Silver

▼ [Answer](#)

(c) Wood
Wood is a bad conductor of heat.

Question 25.

Which of the following substance is not a bad conductor of heat ?

- (a) Rubber
- (b) Aluminium
- (c) Glass
- (d) Plastic

▼ [Answer](#)

(b) Aluminium

Aluminium is not a bad conductor of heat.

Question 26.

The transfer of heat by conduction is in:

- (a) solids
- (b) liquids
- (c) gases
- (d) none of these

▼ [Answer](#)

(a) solids

The transfer of heat by conduction is in solids.

Question 27.

Which of the following colour absorb maximum heat ?

- (a) White
- (b) Black
- (c) Blue
- (d) Pink

▼ [Answer](#)

(b) Black

Black colour absorb maximum heat.

Question 28.

Convection currents are formed in:

- (a) solids
- (b) liquids
- (c) gases
- (d) none of these

▼ [Answer](#)

(b) liquids

Convection currents are formed in liquids.

Question 29.

The phenomenon involved in the formation of land and sea breeze is:

- (a) conduction
- (b) convection
- (c) radiation
- (d) all of these

▼ [Answer](#)

(b) convection

The phenomenon involved in the formation of land and sea breeze is convection.

Question 30.

Which of the following would expand most on being heated for some time ?

- (a) Air
- (b) Water
- (c) Iron
- (d) All of these

▼ [Answer](#)

(a) Air

Air would expand most on being heated for some time.

Question 31.

Heat from the sun reaches us by the process of:

- (a) conduction
- (b) convection
- (c) radiation
- (d) all of these

▼ [Answer](#)

(c) radiation

Heat from the sun reaches us by the process of radiation.

Question 32.

Temperature is a measure of the degree of the:

- (a) hotness of an object
- (b) dryness
- (c) coldness of an object
- (d) none of these

▼ [Answer](#)

(a) hotness of an object

Temperature is a measure of the degree of the hotness of an object.

Question 33.

A clinical thermometer reads temperature from:

- (a) 35°C to 45°C
- (b) 35°C to 42°C
- (c) 35°C to 40°C
- (d) None of these

▼ [Answer](#)

(b) 35°C to 42°C

A clinical thermometer reads temperature from 35°C to 42°C.

Question 34.

Which thermometer is used to measure our body temperature ?

- (a) Laboratory thermometer
- (b) Clinical thermometer
- (c) Digital thermometer
- (d) Both (b) and (c)

▼ [Answer](#)

- (d) Both (b) and (c)

Clinical and digital thermometer measure the body temperature.

Question 35.

Dark coloured clothes are preferred during:

- (a) winter season
- (b) summer season
- (c) rainy season
- (d) none of these

▼ [Answer](#)

- (a) winter season

Dark coloured clothes are preferred during winter season.

Question 36.

Light coloured clothes are preferred during:

- (a) winter
- (b) summer
- (c) rainy
- (d) none of these

▼ [Answer](#)

- (b) summer

Light coloured clothes are preferred during summer season.

Question 37.

Land breeze blows during:

- (a) day
- (b) night
- (c) evening
- (d) none of these

▼ [Answer](#)

- (b) night

Land breeze blows during night.

Question 38.

Sea breeze blows during:

- (a) day
- (b) night
- (c) evening
- (d) none of these

▼ [Answer](#)

- (a) day

Sea breeze blows during day.

Question 39.

Radiated heat travels like light and moves in a:

- (a) curved line
- (b) straight line
- (c) line
- (d) none of these

▼ [Answer](#)

- (b) straight line

Radiated heat travels like light and moves in a straight line.

Question 40.

The heat is transferred directly from its source to another place without help of any substance in between, without a medium is:

- (a) convection
- (b) conduction
- (c) radiation
- (d) none of these

▼ [Answer](#)

- (c) radiation

The heat is transferred from its source to another place without help of any substances in between without a medium, is radiation.

[Match Column A with Column B:](#)

Question 1.

Column A	Column B
(a) Land breeze blows during	(i) summer
(b) Sea breeze blows during	(ii) winter
(c) Dark coloured clothes are preferred during	(iii) day
(d) Light coloured clothes are preferred during	(iv) night

▼ Answer

Column A	Column B
(a) Land breeze blows during	(iv) night
(b) Sea breeze blows during	(iii) day
(c) Dark coloured clothes are preferred during	(ii) winter
(d) Light coloured clothes are preferred during	(i) summer

Question 2.

Column A	Column B
(a) Conductors of heat	(i) 37°C
(b) Insulators of heat	(ii) upward direction
(c) Body temperature	(iii) copper, iron, steel
(d) Hot air moves in	(iv) wood, paper, plastic

▼ Answer

Column A	Column B
(a) Conductors of heat	(iii) copper, iron, steel
(b) Insulators of heat	(iv) wood, paper, plastic
(c) Body temperature	(i) 37°C
(d) Hot air moves in	(ii) upward direction

Question 3.

Column A	Column B
(a) Range of laboratory thermometer	(i) Radiation
(b) Range of clinical thermometer	(ii) -10°C to 110°C
(c) Hotness of an object	(iii) 35°C to 42°C
(d) Sun's heat reaches us through	(iv) Temperature

▼ Answer

Column A	Column B
(a) Range of laboratory	(ii) -10°C to

thermometer	110°C
(b) Range of clinical thermometer	(iii) 35°C to 42°C
(c) Hotness of an object	(iv) Temperature
(d) Sun's heat reaches us through	(i) Radiation

State whether the following statements are 'True' or 'False':

Question 1.

Black colour absorb maximum heat.

▼ [Answer](#)

True

Question 2.

Thermometer is used to measure the temperature of an object.

▼ [Answer](#)

True

Question 3.

Silver is bad conductor of heat.

▼ [Answer](#)

False

Question 4.

The normal temperature of human body is 39°C.

▼ [Answer](#)

False

Question 5.

Laboratory thermometer measure the temperature of different things and place.

▼ [Answer](#)

True

Question 6.

Both thermometers are not used to measure the temperature.

▼ [Answer](#)

False

Question 7.

Temperature of boiling water measured by a clinical thermometer.

▼ [Answer](#)

False

Question 8.

Copper is a better conductor of heat than the stainless steel.

▼ [Answer](#)

True

Question 9.

Convection currents are formed in solids when they are heated.

▼ [Answer](#)

False

Question 10.

The pink prevents mercury level from falling down.

▼ [Answer](#)

True

Question 11.

Umbrella protects us from heat rays of sun.

▼ [Answer](#)

True

Question 12.

Always hold the thermometer by the bulb while reading it.

▼ [Answer](#)

False

[Fill in the blanks:](#)

Question 1.

..... is a bad conductor of heat.

▼ [Answer](#)

Wood

Question 2.

..... is used to measure the temperature.

▼ [Answer](#)

Thermometer

Question 3.

..... heat travels like light and moves in a straight line.

▼ [Answer](#)

Radiated

Question 4.

..... currents are formed in liquid, when they are heated.

▼ [Answer](#)

Convection

Question 5.

The range of laboratory thermometer is

▼ [Answer](#)

– 10°C to 110°C

Question 6.

The range of clinical thermometer is

▼ [Answer](#)

35°C to 42°C

Question 7.

The hotness of an object is determined by its

▼ [Answer](#)

temperature

Question 8.

Temperature of boiling water can be measured by thermometer.

▼ [Answer](#)

laboratory

Question 9.

A cold steel spoon is dipped in a cup of hot milk. It transfers heat to its other end by the process of

▼ [Answer](#)

conduction

Question 10.

Clothes of colour absorb the heat better than the clothes of light colours.

▼ [Answer](#)

dark

Question 11.

Land gets heated faster during the in coastal areas.

▼ [Answer](#)

day

Question 12.

..... of different parts of the body are different.

▼ [Answer](#)

temperature

Question 13.

The substances which do not conduct heat easily are called

▼ [Answer](#)

insulators

Question 14.

The substances which conduct heat easily are called

▼ [Answer](#)

good conductors

Question 15.

Both type of thermometers have

▼ [Answer](#)

mercury

Question 16.

The hand which is over the flame feel because hot air moves in upward direction.

▼ [Answer](#)

hotter
