



SANGFORD SENIOR SECONDARY SCHOOL
NEET JEE ASSESSMENT TEST
CHAPTER: HEAT, CLASS: VII, SUBJECT: PHYSICS
TOTAL MARKS: 30, DURATION: 45 Mins, EXAM NO: N0VIISC01P
INVIGILATOR'S SIGNATURE: _____
STUDENT NAME: _____ DATE: _____

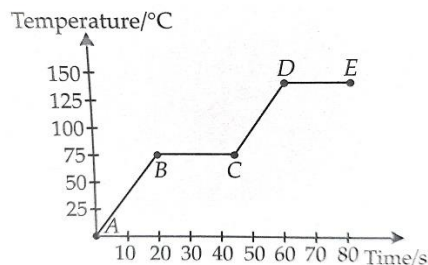


JEE (Main)
Joint Entrance Examination

SECTION A: MULTIPLE CHOICE QUESTIONS

10x1=10

- Which one of the following scale has lower fixed point at 0°C ?
(a) Kelvin scale (b) Fahrenheit scale (c) Celsius scale (d) All of these
- A dog pants with its tongue sticking out on a hot day. The reason is
(a) it is its habit (b) producing more saliva cools down the body temperature
(c) saliva vaporizes, cooling the tongue (d) it is a genetic disease found in few animals like dogs
- When two objects are in thermal contact, the heat is transferred by
(a) conduction (b) convection (c) radiation (d) none of these
- Warm air is
(a) Lighter than cold air (b) heavier than cold air
(c) both have equal weights (d) cannot be said
- The phenomenon involved in sea breeze and land breeze is
(a) convection (b) conduction (c) radiation (d) none of these
- Petrol storage tanks are not painted black because
(a) black is good conductor of heat (b) black is bad conductor of heat
(c) black is good emitter of radiation (d) black is good absorber of radiation
- A liquid changes into a gas at a constant temperature known as its
(a) absolute zero (b) boiling point (c) evaporation point (d) dew point
- Mud houses are cooler in summer and warmer in winter because
(a) mud is a good conductor of heat (b) mud is a superconductor of heat
(c) mud is a bad conductor of heat (d) none of these
- Which point on the graph below shows that the substance is beginning to boil?



- (a) B (b) C (c) D (d) E

10. In conduction, heat flows from

- (a) hotter to hotter region.
- (b) colder to hotter region.
- (c) hotter to colder region.
- (d) colder to colder region.

SECTION B: MATCH THE FOLLOWING

1x2=2

Column-I

- (P) Actual Movement of molecules
- (Q) Rubber, cork, plastic, wood
- (R) Boiling point of water
- (S) Gold, silver, copper, iron
- (a) P → (i), Q → (iv), R →(ii), S → (iii)
- (c) P → (i), Q → (ii), R →(iii), S → (iv)

Column -II

- (i). Convection currents
- (ii). 100°C
- (iii). Good conductors
- (iv). Insulators
- (b) P → (iv), Q → (ii), R →(i), S → (iii)
- (d) P → (iii), Q → (i), R →(iv), S → (ii)

SECTION C: ASSERTION & REASON TYPE

1x5=5

Directions: In each of the following questions, a statement of Assertion (A) is given followed by a corresponding statement of Reason (R) just below it. Of the statements, mark the correct answer as

- (a) If both assertion and reason are true and reason is the correct explanation of assertion.
- (b) If both assertion and reason are true but reason is not the correct explanation of assertion,
- (c) If assertion is true but reason is false.
- (d) If assertion is false but reason is true.

1. **Assertion:** Temperature is the measure of the heat energy.

Reason: Energy is the capacity to do work.

2. **Assertion:** Radiation is a process of transfer of heat in which a material medium is not necessary.

Reason: The heat from the sun reaches us through millions of miles of empty space by convection.

3. **Assertion:** Heat energy is transferred from one body to another due to a temperature difference between them.

Reason: Heating a substance causes a rise in temperature.

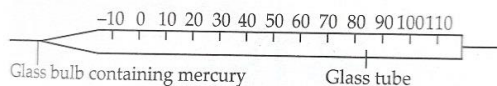
4. **Assertion:** When a very hot liquid is poured into a thick glass tumbler it cracks.

Reason: Unequal expansion of the inner and outer glass walls causes the glass to crack.

SECTION D: COMPREHENSION TYPE

1x3=3

PASSAGE-I : See the following picture of laboratory thermometer and answer the questions.



1. Thermometers are used to measure the temperature. Thermometer senses the temperature by which one of the following liquids?

- (a) Sulfur based fluid
- (b) Potassium based fluid
- (c) Hydrocarbon based fluid
- (d) None of these

2. What is the range of laboratory thermometers which are in the market?

- (a) — 1 to 100 degree Celsius
- (b) — 10 to 1000 degree Celsius
- (c) —10 to 110 degree Celsius
- (d) None of these