Transfer of Thermal Energy

Question Paper

Course	CIE IGCSE Physics
Section	2. Thermal Physics
Topic	Transfer of Thermal Energy
Difficulty	Easy

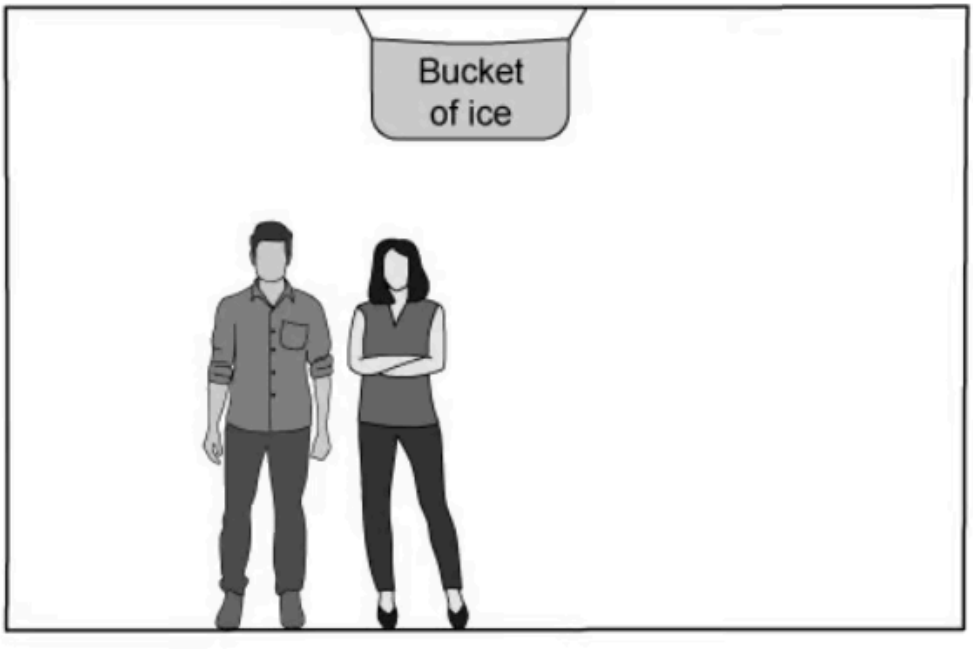
Time Allowed 10

Score /5

Percentage /100

Question 1

The diagram shows a bucket of ice which is hanging from the ceiling of a room as a makeshift air-conditioner. This is a cheaper, less effective means of cooling the room.



The ice cools the air next to it. What happens to the cold air and why?

	What happens	Explanation
A	the cold air rises	it is less dense than the warmer air in the room
B	the cold air rises	it is more dense than the warmer air in the room
C	the cold air falls	it is less dense than the warmer air in the room
D	the cold air falls	it is more dense than the warmer air in the room

[1 mark]

Question 2

Which of the following statements about convection is correct?

Warm air rises because:

A. The air molecules expand and become less dense.

B. The air molecules move further apart, making the air less dense.

C. The air molecules contract, making the air less dense.

D. The air molecules move closer together, making the air less dense.

[1 mark]

Question 3

Which of the following statements about thermal radiation is correct?

A. It is electromagnetic radiation.

B. It can only happen in a vacuum.

C. It involves movement of molecules due to changes in density.

D. It involves transfer of electrons through a material.

[1 mark]

Question 4

The Sun is the source of the majority of the energy on Earth.

How does thermal energy from the Sun travel to the Earth?

A. By conduction, convection and radiation

B. By conduction and convection only

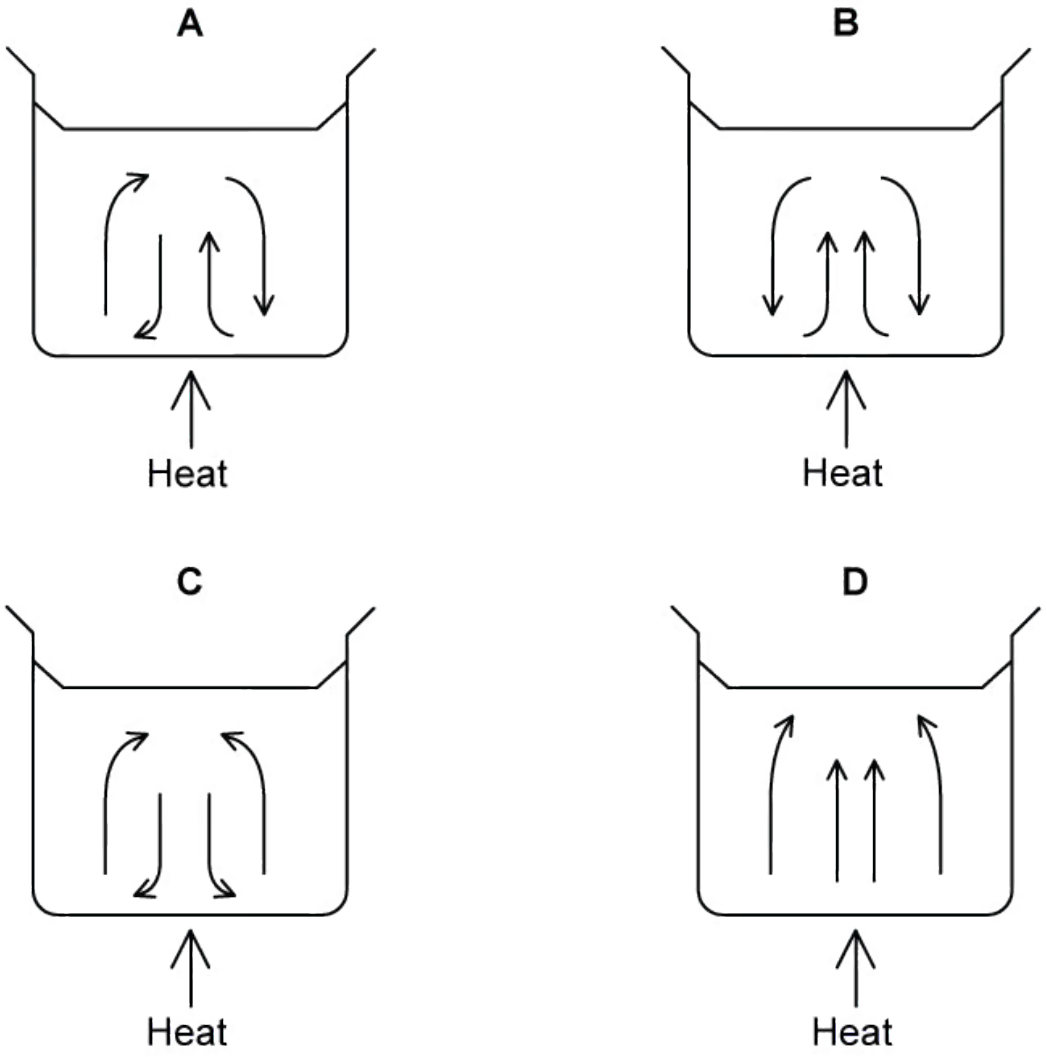
C. By convection and radiation only

D. By radiation only

[1 mark]

Question 5

Which diagram correctly shown the motion of particles in a beaker filled with liquid heated from the base?



[1 mark]