

11. A cup of hot tea on a metal table in a room loses heat by

Conduction

Convection

Radiation

All the above

**Answer (d).**

12. Which among the following is true of a sphere, a cube and circular plate of same material and same mass heated to same temperature?

Sphere cools the slowest

Circular plate cools the fastest

Cube cools the fastest

Circular plate cools the slowest

**Answer (b).**

13. At what temperature are the Celsius and Fahrenheit equal?

+ 40°

- 40°

- 0°

+ 100°

**Answer (b).**

14. What would happen to a hole in a metal sheet when the sheet is heated?

It decreases in size

It increases in size

No change is seen

First increases and then decreases

**Answer (b).**

15. Which of the following is equivalent of a calorie?

the specific heat of water.

the energy needed to increase the temperature of 1 gram of water 1 degree Celsius.

equivalent to a little over 4 joules of mechanical work.

all of the above.

**Answer (d).**

16. In which of the following processes of heat transfer no medium is required?

Conduction

Convection

Radiation

All

**Answer (c).**

17. In which of the following processes is heat transferred directly from molecule to molecule?

conduction

convection

radiation

all of the above

**Answer (a).**

18. When a solid, liquid, or a gas changes from one physical state to another, the change is called

melting

enthalpy

a phase change

sublimation

**Answer (c).**

19. The surface which radiates more heat at a given temperature is

Black and Polished

White and polished

White and Rough

Black and Rough

**Answer (d).**

20. Compared to warm air, cool air can hold

more water vapour

less water vapour

the same amount of water vapour

temperature is unimportant here

**Answer (b).**