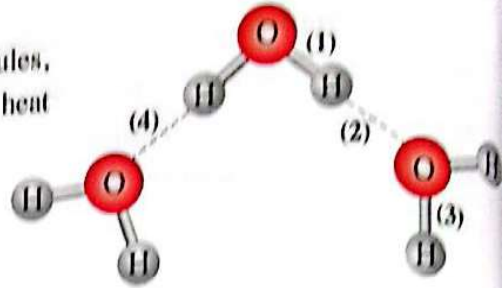


Specific heat of water

73 The opposite figure shows some water molecules, so the bonds responsible for the high specific heat of water are

- (a) (1), (2)
- (b) (1), (3)
- (c) (3), (4)
- (d) (2), (4)



74 The following figures represent the water molecules in three different physical states:



Figure (1)



Figure (2)

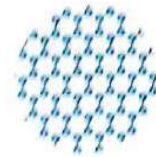


Figure (3)

Then the specific heat of water is

- (a) greatest in (1)
- (b) greatest in (2)
- (c) greatest in (3)
- (d) equal in the three figures

75 Two equal masses of water and oil were at the same temperature in two identical containers. If the two containers are placed together on an electric hot plate, then the temperature of the oil reaches T in time t_0 . Given that the specific heat capacity of water is greater than the specific heat capacity of oil, the temperature of the water will reach T in a time

- (a) greater than t_0
- (b) less than t_0
- (c) equal to t_0
- (d) the answer cannot be determined

76 The opposite figure shows the specific heat capacities of four different samples of the same mass. Which of these samples requires a greater amount of heat to raise its temperature by 1 K?

- (a) The sample of water vapor.
- (b) The sample of ice.
- (c) The sample of seawater.
- (d) The sample of distilled water.

