

5 (a) (i) Objects A and B are in thermal equilibrium.

Explain the above statement.

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[2]

(ii) State the features of the thermodynamic temperature scale.

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[2]

(b) (i) Explain why real gases behave like ideal gases under low pressures.

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[2]

(ii) Calculate the total internal energy of one mole of ideal gas at 120 °C.

total internal energy = J [2]

