Paper 3

Questions are applicable for both core and extended candidates

1 Table 5.1 shows the properties of four substances.

Table 5.1

substance	boiling point	electrical conductivity of solid	electrical conductivity when molten	density in g/cm ³
aluminium	high	conducts	conducts	2.70
diamond				3.51
potassium bromide	high	does not conduct	conducts	2.75
sulfur	low	does not conduct		2.07

(d)	State the property of aluminium given in Table 5.1 which makes it suitable for the manufacture of aircraft.
	[1]

(a) Complete Table 5.1 to show the electrical conductivity of solid diamond and molten sulfur. [2]

2

Boron and aluminium are Group III elements.

Paper 4

Questions are applicable for both core and extended candidates unless indicated in the question

State two physical properties of aluminium that make it suitable for use in overhead electrical cables.
1
2
[2]