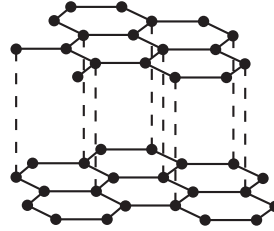


diamond



graphite

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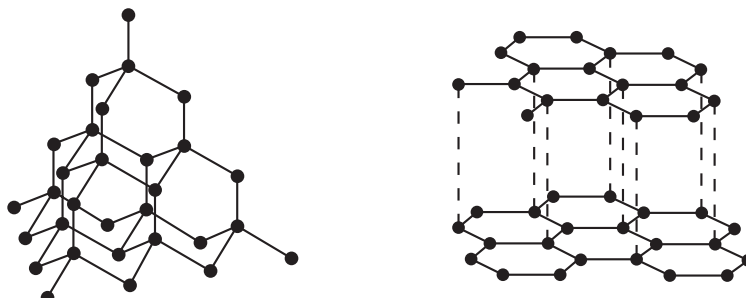
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&	HDFKDW RPLVERGHG FRYDOHQWOWRIRXURWKHUDWRPV	LEXWWLWRRROV
'	HDFKDW RPLVERGHG FRYDOHQWOWRIRXURWKHUDWRPV	DVDEBOHFWULFDQFRQXFWRU

Paper 2

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

- 7 The structures of diamond and graphite are shown.



Which statement about diamond and graphite is correct?

- A Diamond and graphite contain strong covalent bonds between carbon atoms.
 - B Diamond and graphite have delocalised electrons.
 - C Diamond and graphite have layered structures.
 - D Diamond and graphite have low melting points.
- 8 Which statement about graphite explains why it is used as an electrode?
- A It contains ions.
 - B It has a giant covalent structure.
 - C It is a metal.
 - D It has mobile electrons.
- 9 Which substance has a similar structure to silicon(IV) oxide?
- A carbon dioxide
 - B diamond
 - C graphite
 - D sodium oxide

10 Graphite has a giant covalent structure.

Which statements about graphite are correct?

- 1 Carbon atoms form four covalent bonds with neighbouring atoms.
- 2 There are delocalised electrons between layers of carbon atoms.
- 3 Graphite is a useful lubricant.
- 4 Graphite is a good conductor of electricity.

A 1 and 2 **B** 1, 3 and 4 **C** 2, 3 and 4 **D** 3 and 4 only