

**22** Which statement about electrical resistivity is correct?

- A** The resistivity of a material is numerically equal to the resistance in ohms of a cube of that material, the cube being of side length one metre and the resistance being measured between opposite faces.
- B** The resistivity of a material is numerically equal to the resistance in ohms of a one metre length of wire of that material, the area of cross-section of the wire being one square millimetre and the resistance being measured between the ends of the wire.
- C** The resistivity of a material is proportional to the cross-sectional area of the sample of the material used in the measurement.
- D** The resistivity of a material is proportional to the length of the sample of the material used in the measurement.