

- 5 A sample of a material is in the form of a wire. The material has a large value of the Young modulus.

Which of the following statements best describes the material?

- ☐ A A large force per unit cross-sectional area is required to break the wire.
- ☐ B The mass per unit volume is large.
- ☐ C The ratio of tensile stress to tensile strain is large.
- ☐ D After removing a large stress the sample returns to its original length.

(Total for Question 5 = 1 mark)