## **Answer ALL questions.**

Some questions must be answered with a cross in a box  $\boxtimes$ . If you change your mind about an answer, put a line through the box  $\boxtimes$  and then mark your new answer with a cross  $\boxtimes$ .

1 A material is stretched by applying an increasing load. The material shows elastic behaviour as it is stretched.

(a) Describe what is meant by elastic behaviour.

(2)

(b) The material obeys Hooke's law.

Sketch a graph for this material to show that it obeys Hooke's law as it is stretched.

You should label both axes with appropriate physical quantities.

(3)

(Total for Question 1 = 5 marks)

