

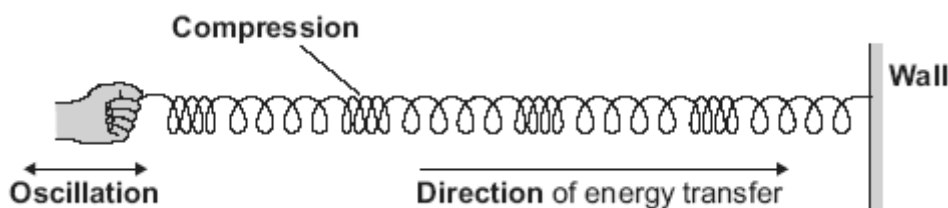
Name of the Student: _____

Max. Marks : 8 Marks

Time : 8 Minutes

Q1.

- (a) The diagram shows a longitudinal wave being produced in a stretched spring.



- (i) Use the bold words from the diagram to complete the following sentence. Put only **one** word in each space.

A longitudinal wave is one in which the _____ causing
the wave is parallel to the _____ of energy transfer.

(2)

- (ii) Name the type of energy that is transferred by longitudinal waves.

(1)

- (b) The diagram shows water waves made by a wave machine in a swimming pool.



Every second, two waves go past a person standing in the swimming pool.

The waves have a wavelength of 0.8 metres.

Calculate the speed of the water waves.

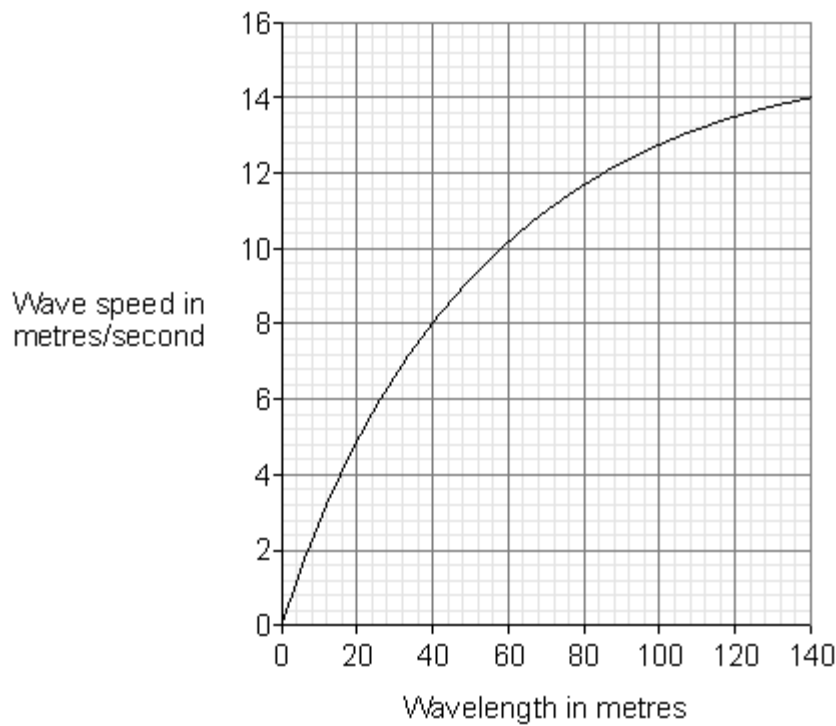
Write down the equation you use, and then show clearly how you work out your answer.

Give the correct unit in your answer.

Wave speed = _____

(3)

- (c) The graph shows how the speed of deep ocean waves depends on the wavelength of the waves.



What can you conclude from the graph?

(2)

(Total 8 marks)

