

GCSE Physics B (Twenty First Century Science)
J259/01 Breadth in Physics (Foundation Tier)

Question Set 20

1

Alex plays the violin. The violin has four strings. The strings are 32.5 cm in length, as shown in **Fig. 1.1**.

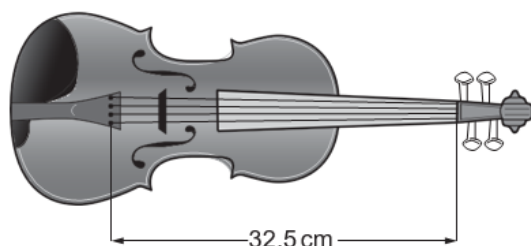


Fig. 1.1

When Alex plays the violin, waves pass along the strings. **Fig. 1.2** shows a wave on one of the strings.

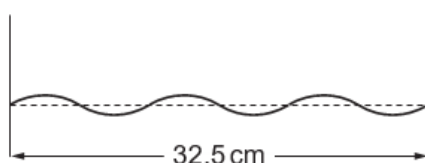


Fig. 1.2

(a) Calculate the wavelength of the wave shown in **Fig 1.2**.

Give your answer to **3** significant figures.

(b) (i) Explain how **Fig. 1.2** shows that the wave is a transverse wave. Wavelength =cm [2]

(ii) Explain how the sound waves produced by the violin are different to the waves on the string. [2]

[2]

Total Marks for Question Set 20: 6

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