

- 6 (a) Describe the conditions required for two waves to be able to form a stationary wave.

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..... [2]

- (b) A stationary wave on a string has nodes and antinodes. The distance between a node and an adjacent antinode is 6.0 cm.

- (i) State what is meant by a *node*.

..... [1]

- (ii) Calculate the wavelength of the two waves forming the stationary wave.

wavelength = cm [1]

- (iii) State the phase difference between the particles at two adjacent antinodes of the stationary wave.

phase difference = ° [1]

[Total: 5]