

- 20** Two waves of equal frequency and amplitude are travelling in opposite directions along a stretched string. When they meet, they form a stationary wave with three nodes and two antinodes. The frequency of both waves is doubled and a new stationary wave is formed.

How many antinodes are there in the new stationary wave?

**A** 1

**B** 3

**C** 4

**D** 5

- 21** A spherical water droplet with density  $1000 \text{ kg m}^{-3}$  and diameter  $1.20 \text{ }\mu\text{m}$  is suspended in a