

- 17 Transverse progressive sinusoidal waves of wavelength λ are passing vertically along a horizontal rope. P and Q are points on the rope $\frac{\lambda}{4}$ apart. The direction of energy transfer is from P to Q.

Which of the following describes the displacement and movement of Q at the instant when P is displaced downwards and moving upwards?

	displacement of Q	movement of Q
A	zero	upwards
B	downwards	downwards
C	upwards	downwards
D	upwards	upwards