

21 A transverse wave is moving along a rope. Two points X and Y on the rope are a quarter of a wavelength apart from each other.

Which statement is **not** possible for the two points X and Y at any instant?

- A** They are both stationary.
- B** They are displaced in opposite directions from their equilibrium position.
- C** They are moving in opposite directions.
- D** They both have displacements of the same magnitude from their equilibrium positions.