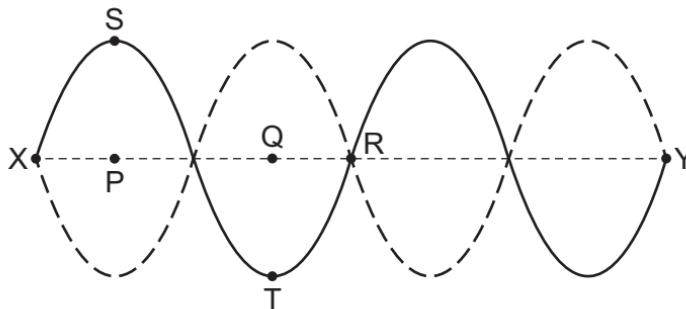


- 25 The diagram shows a string stretched between fixed points X and Y. There is a stationary wave on the string.



The solid curve shows the string at a position of maximum displacement at time t_0 . The dashed curve shows the other position of maximum displacement. The straight central dashed line shows the mean position of the string.

Point S on the string is directly above point P. Point T on the string is directly below point Q.

Which statement is correct?

- A A short time after t_0 , point R on the string will be displaced.
- B A short time after t_0 , points S and T on the string move in opposite directions.
- C The distance between P and Q is one wavelength.
- D Two moving points on the string that are equal distances from point R vibrate in phase.