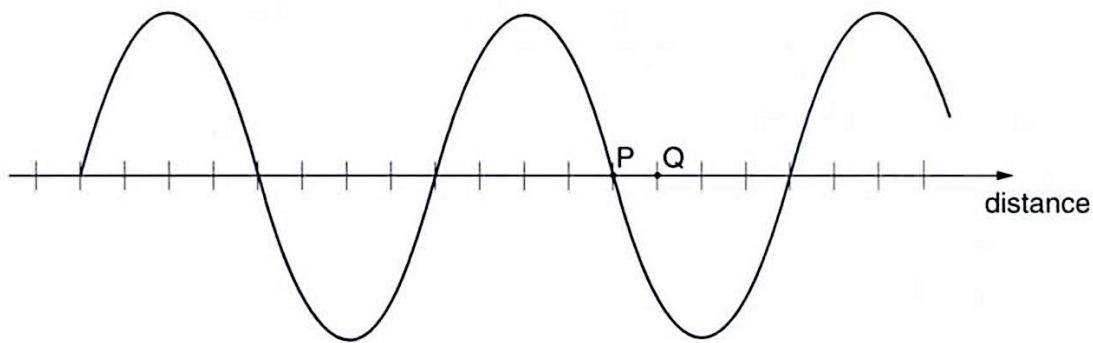


- 17** The diagram shows a transverse wave at a particular instant. The wave is travelling to the right. The frequency of the wave is 25 Hz.



At the instant shown the displacement is zero at the point P.

What is the shortest time to elapse before the displacement is zero at point Q?

**A** 5 ms

**B** 15 ms

**C** 25 ms

**D** 45 ms