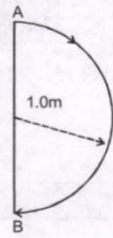


QUES 3

In 1.0 s, a particle goes from point A to point B , moving in a semicircle of radius 1.0 m (see Figure). The magnitude of the average velocity [1999S - 2 Marks]

- (a) 3.14 m/s
- (b) 2.0 m/s
- (c) 1.0 m/s
- (d) Zero



$$\begin{aligned} \text{(b) } |\text{Average velocity}| &= \frac{|\text{displacement}|}{\text{time}} \\ &= \frac{2r}{t} = 2 \times \frac{1}{1} = 2 \text{ m/s. } (\because r = 1 \text{ m}; t = 1 \text{ s}) \end{aligned}$$