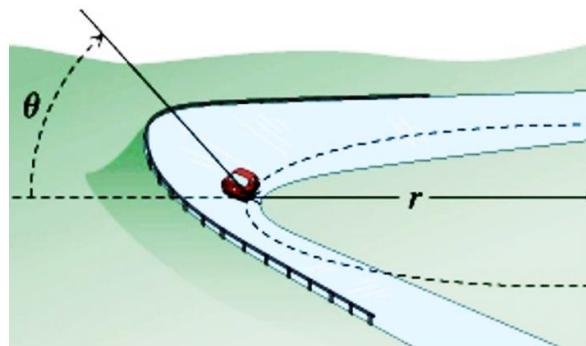


- 8 A car is driven round an icy road banked at an angle  $\theta$  of  $25^\circ$  and a radius  $r$  of 50 m as shown.



The frictional force between the tyres and the road is negligible.

What is the speed that the car can travel at while maintaining the circular radius?

- A  $2.6 \text{ m s}^{-1}$
- B  $7.3 \text{ m s}^{-1}$
- C  $15.1 \text{ m s}^{-1}$
- D  $21.9 \text{ m s}^{-1}$