The arm $AB$ of length 5 m is used to provide an elevated platform for construction workers. In the position shown, arm $AB$ is being raised at the constant rate $\frac{d\theta}{dt} = 0.25 \text{ rad/s}$; simultaneously, the unit is being rotated counterclockwise about the $Y$ axis at the constant rate $\omega = 0.15 \text{ rad/s}$. Knowing that $\theta = 20^\circ$, determine the velocity and acceleration of point $B$. 