## Homework H.2.D

**Given:** Roller D of the mechanism shown is moving downward along a straight vertical surface with a constant speed of  $v_D$ . At the instant shown, link AB is vertical.

Find: For this position:

- (a) Determine the angular velocities of links AB and BD. Write your answers as vectors.
- (b) Determine the angular accelerations of links AB and BD. Write your answers as vectors.



Use the following parameters in your analysis:  $\theta = 53.13^{\circ}$ , L = 2 m and  $v_D = 15$  m/s.