200 mm

400 mm

200mm

20 degrees

B

A

V = 300 m/s

**A pendulum consisting of 2 3.2 kg concentrated masses are positioned as shown on a light rigid rod. The pendulum is swinging threw the vertical position with a clockwise angular velocity of**

**W = 6 rads/sec when a 50 gram bullet (A) traveling with a velocity of 300 m/s traveling in the direction shown strikes the lower mass and becomes imbedded in it. Calculate the angular velocity Wf which the pendulum has immediately after impact and find the maximum angular deflection B of the pendulum**