3 A stone is thrown vertically upwards in a medium in which the viscous drag cannot be neglected. If the times of flight for the upward motion t_u and the downward motion t_d (to return to the same level) are compared, which of the following statement is corrent?

A $t_d < t_u$, because at a given speed the net accelerating force when the stone is moving downwards is greater than the retarding force when it is moving upwards.

B $t_d < t_u$, because the stone is moving with the greatest speed at the moment of projection and so greatest effect of the viscous drag.

C $t_d = t_u$, because viscous drag always opposes motion and so will affect motion of the stone with the same effect whether the stone is moving upwards or downwards.

D $t_d > t_u$, because at a given speed the net accelerating force when the body is moving downwards is smaller than the retarding force when it is moving upwards.