

Question 1**(3 marks)**

A ball is launched vertically into the air with an initial velocity at $t = 0$ from ground level ($s = 0$) and returns to ground level. It takes four seconds for it to reach its maximum height. Taking upwards as positive, graph the ball's displacement, velocity and acceleration versus time from take-off to landing. Ignore air resistance and do not place any values on the y-axis.

