A particle P is projected from a point O on horizontal ground. At the instant t s after projection, the horizontal and vertically upwards displacements of P from O are x m and y m respectively. The equation of the trajectory of P is $y = 3x - 0.05x^2$.

(i) Find the angle of projection and the initial speed of P. [3]

(ii) Find the coordinates of P at the instant when OP makes an angle of $45°$ with the horizontal. [2]

(iii) For the instant when P is at its greatest height above the ground, calculate this height and the corresponding value of t. [4]