

6 A gamma photon of energy 18 MeV produces a particle and its antiparticle.

Which of the following will give the maximum possible mass of the particle in kg?

☐ A $\frac{9 \times 1.6 \times 10^{-19}}{3 \times 10^8}$

☐ B $\frac{9 \times 10^6 \times 1.6 \times 10^{-19}}{3 \times 10^8}$

☐ C $\frac{9 \times 1.6 \times 10^{-19}}{(3 \times 10^8)^2}$

☐ D $\frac{9 \times 10^6 \times 1.6 \times 10^{-19}}{(3 \times 10^8)^2}$

(Total for Question 6 = 1 mark)