

- 4 A particle has a mass of  $3.17 \times 10^{-27} \text{ kg}$ .

Which of the following gives the mass in  $\text{GeV}/c^2$ ?

☐ A 
$$\frac{3.17 \times 10^{-27} \times 10^9 \times 1.6 \times 10^{-19}}{3.00 \times 10^8}$$

☐ B 
$$\frac{3.17 \times 10^{-27} \times 10^9 \times 1.6 \times 10^{-19}}{(3.00 \times 10^8)^2}$$

☐ C 
$$\frac{3.17 \times 10^{-27} \times (3.00 \times 10^8)^2}{1.6 \times 10^{-19}}$$

☐ D 
$$\frac{3.17 \times 10^{-27} \times (3.00 \times 10^8)^2}{10^9 \times 1.6 \times 10^{-19}}$$

(Total for Question 4 = 1 mark)