20. A student carries out an experiment to determine the specific heat capacity c of a solid.

The relationship used to calculate c is

$$c = \frac{E}{m\Delta T}$$

The recorded measurements and their percentage uncertainties are shown.

energy supplied, $E = 5000\ \text{J} \pm 1\%$

mass of solid, $m = 0{\cdot}20\ \text{kg} \pm 2\%$

change in temperature, $\Delta T = 4{\cdot}5\ ^\circ\text{C} \pm 5\%$

A good estimate of the percentage uncertainty in the calculated value of c is

A 8%

B 7%

C 5%

D 3%

E 1%.

[END OF SECTION 1. NOW ATTEMPT THE QUESTIONS IN SECTION 2 OF YOUR QUESTION AND ANSWER BOOKLET]