1 A capacitor is a device used to store electric charges. It consists of a pair of conducting plates. The capacitance C of a capacitor is defined as the ratio of the charge Q on either plate to the magnitude of the potential difference V between the plates, as depicted in the formula:

$$C = \frac{Q}{V}$$

Which of the following shows the SI base units for capacitance C?

A $A^2\ s^4\ m^{-2}\ kg^{-1}$ **B** $s^2\ m^{-2}\ kg^{-1}$ **C** $A^2\ m^{-2}\ kg^{-1}$ **D** $C^2\ kg^{-1}\ m^{-2}\ s^2$

2 Four students conduct their own experiments to determine the value of Planck's constant. The