

2. Determine the SI base units of  $K$ .

SI base units of  $K$  ..... [2]

(ii) Data in SI units for the oscillations of  $X$  are shown in Fig. 1.2.

quantity	value	uncertainty
$T$	0.45	$\pm 2.0\%$
$l$	0.892	$\pm 0.2\%$
$M$	0.2068	$\pm 0.1\%$
$K$	$1.48 \times 10^5$	$\pm 1.5\%$

**Fig. 1.2**

Calculate  $E$  and its actual uncertainty.

$E = \dots \pm \dots \text{ kg m}^{-1} \text{ s}^{-2}$  [4]