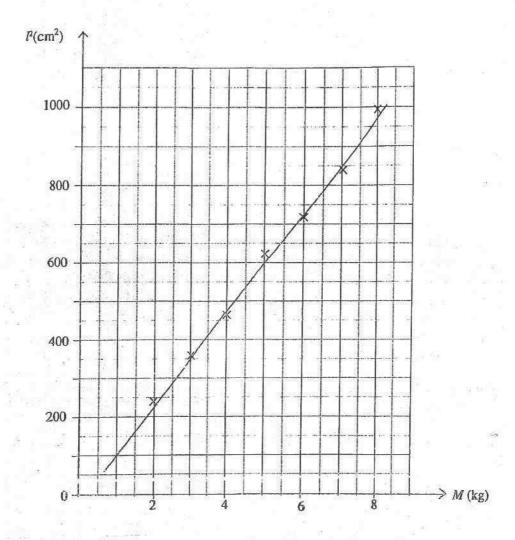
2000 A/L Structured Essay Question No (03)

		ment using a sonomete	r to determine the fr	equency (f) of
When	re should he place the sound	led tuning fork in orde	er to obtain resonance	?
			•••••••••••••••••••••••••••••••••••••••	* 1
What	procedure must he follow i	n order to obtain the i	fundamental resonance	ce length?
******	,			
of the	e sonometer wire using di	fferent weights (Mg).	Write down an exp	
eventure contra				18
(i)	Which of his experimental	" values is considere	d to have the highest	accuracy?
			+	
,	O' - 41		2.300	
(11)	Give the reason.			
		26-		
	When What What What What What What What What	Where should he place the sound What procedure must he follow is The student measured the fundame of the sonometer wire using dis M, L, f and the mass per unit len (i) Which of his experimental	Where should he place the sounded tuning fork in order What procedure must he follow in order to obtain the sounded tuning fork in order The student measured the fundamental resonance lengths of the sonometer wire using different weights (Mg). M, I, f and the mass per unit length m of the sonometer (i) Which of his experimental 'l' values is considere (ii) Give the reason.	Where should he place the sounded tuning fork in order to obtain resonance. What procedure must he follow in order to obtain the fundamental resonance. The student measured the fundamental resonance lengths (I) corresponding to do of the sonometer wire using different weights (Mg). Write down an exp. M, I, f and the mass per unit length m of the sonometer wire.

(e) In this experiment the graph plotted by the student is shown in the figure.



- (i) Mark with arrows, two suitable points on the graph, which you would use to find its gradient.
- (ii) Find the gradient of the graph.

(f) If the value of m is $8 \times 10^{-4} \,\mathrm{kg} \,\mathrm{m}^{-1}$, find the frequency of the tuning fork.