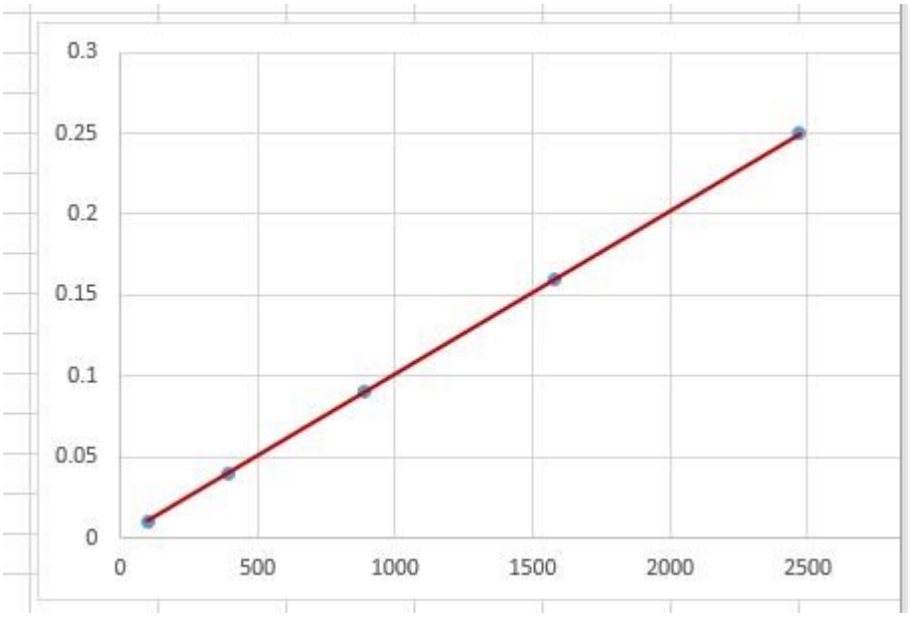
MARKING SCHEME OF PHYSICS ALTERNATIVE TO PRACTICAL FOR S5 EXAM 2024

Height of water x ($x10^{-3}m$)	2.50	10.00	22.50	40.00	62.50
Time for 20 oscillations(s)	2.00	4.00	6.00	8.00	10.00
Period T(s)	**o.1**	**0.2**	**0.3**	**0.4**	**0.5**
T^2	**0.01**	**0.04**	**0.09**	**0.16**	**0.25**
$4\pi^2 x$ ($x10^{-3}m$)	98.48	394.80	888.30	1579.20	2467.50

1. **(0.5mark)** for each point
2. Graph of T^2 against $4\pi^2 x$



- Title **(1mark)**
- Oriented axes **(1mark)**
- Naming axes **(1mark)**
- Labelling axes **(1mark)**
- Plotting points **(2.5mark)**
- Joining point **(1mark)**

Axes meeting at point (0,0) **(1mark)**

3. $S = 3. S = \frac{2467.50-98.48}{0.25-0.01} = 9.87\ m/s^2$ (**1mark)**

4. S is gravitational acceleration (**1mark)**