

JAWAPAN KERTAS 3

SET 1

Soalan Question		Jawapan Answers	Markah Marks																		
1.	(a)(i)	Kedalaman rendaman <i>Immersion depth</i>	1																		
	(ii)	Daya apungan <i>Buoyant force</i>	1																		
	(b)	<table><thead><tr><th>d / cm</th><th>W / N</th><th>F_b / N</th></tr></thead><tbody><tr><td>5.0</td><td>8.8</td><td>1.2</td></tr><tr><td>10.0</td><td>7.6</td><td>2.4</td></tr><tr><td>15.0</td><td>6.5</td><td>3.5</td></tr><tr><td>20.0</td><td>5.3</td><td>4.6</td></tr><tr><td>25.0</td><td>4.2</td><td>5.8</td></tr></tbody></table>	d / cm	W / N	F_b / N	5.0	8.8	1.2	10.0	7.6	2.4	15.0	6.5	3.5	20.0	5.3	4.6	25.0	4.2	5.8	6
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25.0	4.2	5.8																			
	(c)	Graf F_b melawan d Graph of F_b against d	3																		
	(d)	F_b berkadar langsung dengan d . F_b is directly proportional to d .	1																		
	(e)	Kecerunan / Gradient = $\frac{5.8 - 0.0}{25.0 - 0.0}$ $m = 0.232$ (tanpa unit / without unit)	1 1																		
	(f)	Kedudukan mata haruslah berserenjang dengan skala bacaan neraca spring bagi mengelakkan ralat paralaks. <i>The position of eye is perpendicularly to the scale reading of the spring balance to avoid parallax error.</i>	1																		

SET 2

Soalan Question		Jawapan Answers	Markah Marks												
1.	(a)(i)	Arus elektrik <i>Electric current</i>	1												
	(ii)	Beza keupayaan <i>Potential difference</i>	1												
	(iii)	Ketebalan dawai <i>Thickness of wire</i>	1												
	(b)	<table><tr><th><i>I / A</i></th><th><i>V / V</i></th></tr><tr><td>0.12</td><td>0.3</td></tr><tr><td>0.14</td><td>0.4</td></tr><tr><td>0.16</td><td>0.7</td></tr><tr><td>0.18</td><td>0.9</td></tr><tr><td>0.20</td><td>1.3</td></tr></table>	<i>I / A</i>	<i>V / V</i>	0.12	0.3	0.14	0.4	0.16	0.7	0.18	0.9	0.20	1.3	4
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	(c)		3												
	(d)	V bertambah dengan I <i>V increases with I</i>	1												
	(e)	$m = \frac{y_2 - y_1}{x_2 - x_1}$ $= \frac{1.2 - 0.2}{0.20 - 0.12}$ $= 12.5 \, \Omega$	1 1 1												
	(f)	Tidak <i>No</i>	1												