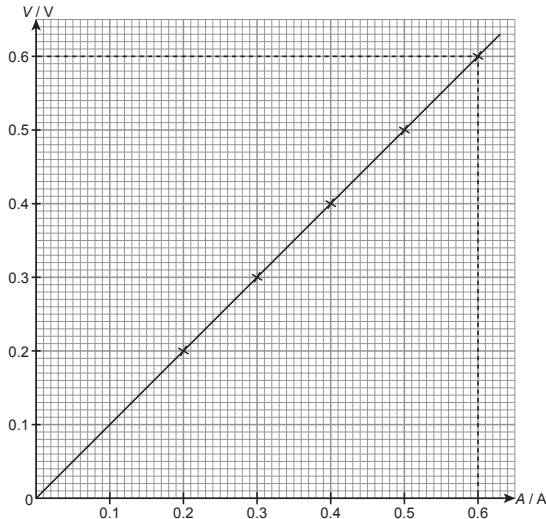
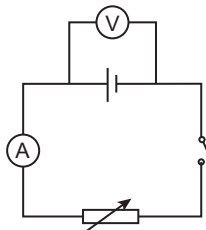
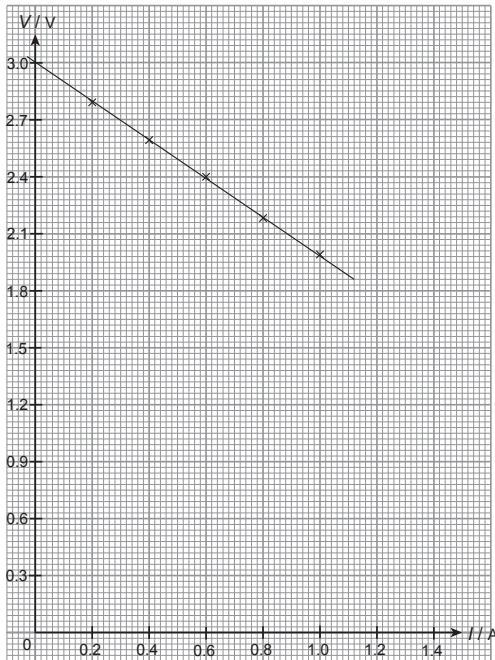


JAWAPAN KERTAS 3

SET 1

Soalan Question	Jawapan Answers	Markah Marks																		
1. (a)	Arus / Current	1																		
(b)	Beza keupayaan / Potential different	1																		
(c)	<table border="1"> <thead> <tr> <th>Arus, I (A) Current, I(A)</th><th>Beza keupayaan, V(V) Potential difference, V(V)</th><th>Rintangan. R (Ω) Resistance, R(Ω)</th></tr> </thead> <tbody> <tr> <td>0.2</td><td>0.2</td><td>1.0</td></tr> <tr> <td>0.3</td><td>0.3</td><td>1.0</td></tr> <tr> <td>0.4</td><td>0.4</td><td>1.0</td></tr> <tr> <td>0.5</td><td>0.5</td><td>1.0</td></tr> <tr> <td>0.6</td><td>0.6</td><td>1.0</td></tr> </tbody> </table>	Arus, I (A) Current, I(A)	Beza keupayaan, V(V) Potential difference, V(V)	Rintangan. R (Ω) Resistance, R(Ω)	0.2	0.2	1.0	0.3	0.3	1.0	0.4	0.4	1.0	0.5	0.5	1.0	0.6	0.6	1.0	6
Arus, I (A) Current, I(A)	Beza keupayaan, V(V) Potential difference, V(V)	Rintangan. R (Ω) Resistance, R(Ω)																		
0.2	0.2	1.0																		
0.3	0.3	1.0																		
0.4	0.4	1.0																		
0.5	0.5	1.0																		
0.6	0.6	1.0																		
(d)		3																		
(e)	Berkadar terus / Directly proportional	1																		
(f)	Kecerunan / Gradient = $\frac{0.6 - 0 (V)}{0.6 - 0(A)}$ $= 1.0 \text{ V A}^{-1}$ atau / or 1.0Ω	1 1																		
(g)	Bertambah / Increase	1																		

SET 2

Soalan Question	Jawapan Answers	Markah Marks												
2. (a)		1												
(b)	Voltan merentasi bateri // Bacaan voltmeter // V Voltage across battery // Voltmeter reading // V	1												
(c)	$V_0 = 3.0 \text{ V}$ <table border="1" data-bbox="611 686 1004 913"><thead><tr><th>I / A</th><th>V / V</th></tr></thead><tbody><tr><td>0.20</td><td>2.8</td></tr><tr><td>0.40</td><td>2.6</td></tr><tr><td>0.60</td><td>2.4</td></tr><tr><td>0.80</td><td>2.2</td></tr><tr><td>1.00</td><td>2.0</td></tr></tbody></table>	I / A	V / V	0.20	2.8	0.40	2.6	0.60	2.4	0.80	2.2	1.00	2.0	1 2
I / A	V / V													
0.20	2.8													
0.40	2.6													
0.60	2.4													
0.80	2.2													
1.00	2.0													
(d)		3												
(e)	V berkurang secara linear dengan I V decreases linearly with I	1												



Soalan Question		Jawapan Answers	Markah Marks
	(f)(i)	3.0 V (graf wajib memintas paksi-V) <i>3.0 V (graph must cut V-axis)</i>	2
	(ii)	$r = -m, m = \text{Kecerunan / Gradient}$ $= -\left(\frac{2.0 - 2.8}{1.00 - 0.20}\right)$ $= 1 \, \Omega$	1 1 1
	(g)	Bertambah <i>Increase</i>	1