



**SEKOLAH BERASRAMA PENUH
BAHAGIAN PENGURUSAN SEKOLAH BERASRAMA PENUH/ KLUSTER
KEMENTERIAN PELAJARAN MALAYSIA**

PEPERIKSAAN PERCUBAAN PMR 2008

**SKEMA PEMARKAHAN
SAINS
(KERTAS 1 & KERTAS 2)
55/1 & 55/2**

SAINS (SBP)**PERCUBAAN PENILAIAN MENENGAH RENDAH 2008****SKEMA JAWAPAN KERTAS 1**

BIL	KONSTRUK	ARAS	JAWAPAN	STIMULUS
1	PSNR010102	R	A	DIAGRAM
2	KSNR010101	R	B	
3	PSNR010201	T	D	DIAGRAM
4	PSNR010102	S	A	
5	KSNR010501	S	D	DIAGRAM
6	KSNR010201	S	C	DIAGRAM
7	KSNR010201	T	B	DIAGRAM
8	KSNR020102	R	C	
9	PSNR010102	R	B	DIAGRAM
10	KSNR010201	T	D	DIAGRAM
11	PSNR010203	R	B	
12	KSNR020102	S	A	DIAGRAM
13	KSNR010401	R	B	DIAGRAM
14	PSNR010201	R	D	
15	KSNR020102	T	C	DIAGRAM
16	PSNR010102	R	C	
17	KSNR010201	S	D	DIAGRAM
18	KSNR010401	R	B	
19	KSNR020101	T	D	DIAGRAM
20	PSNR010101	R	C	
21	PSNR010202	S	D	DIAGRAM
22	KSNR020102	R	A	
23	KSNR010401	R	C	
24	KSNR020102	S	D	DIAGRAM
25	KSNR010501	S	D	DIAGRAM
26	PSNR010102	R	C	DIAGRAM
27	PSNR010102	R	A	DIAGRAM
28	PSNR010102	R	B	
29	KSNR010201	R	C	DIAGRAM
30	PSNR010102	R	C	DIAGRAM
31	KSNR010101	S	B	DIAGRAM
32	KSNR020102	R	D	
33	KSNR010201	R	C	DIAGRAM
34	KSNR010201	T	D	DIAGRAM
35	KSNR010401	S	C	DIAGRAM
36	KSNR020101	T	C	DIAGRAM
37	KSNR020201	T	A	
38	PSNR010102	R	B	DIAGRAM
39	PSNR010201	S	C	DIAGRAM
40	PSNR010201	R	D	

PEPERIKSAAN PERCUBAAN PMR 2008
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SKEMA JAWAPAN KERTAS 2

QUESTIONS	RUBRIC	MARKS												
1 (a)	(i) L : Element M : Mixture N : Compound	1 1 1	3											
	(ii) <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border: none;">Substance</th> <th style="border: none;"></th> <th style="text-align: right; border: none;">Example</th> </tr> </thead> <tbody> <tr> <td style="border: 1px solid black; text-align: center; width: 50px; height: 40px;">L</td> <td style="border: none; text-align: center;">—</td> <td style="border: 1px solid black; text-align: center; width: 200px; height: 40px;">Gold</td> </tr> <tr> <td style="border: 1px solid black; text-align: center;">M</td> <td style="border: none; text-align: center;">/</td> <td style="border: 1px solid black; text-align: center;">Water</td> </tr> <tr> <td style="border: 1px solid black; text-align: center;">N</td> <td style="border: none; text-align: center;">\</td> <td style="border: 1px solid black; text-align: center;">Brass</td> </tr> </tbody> </table>	Substance		Example	L	—	Gold	M	/	Water	N	\	Brass	1 1 1
Substance		Example												
L	—	Gold												
M	/	Water												
N	\	Brass												
	TOTAL		6											
2 (a)	(i) Moves inwards / towards the boiling tube (ii) Air pressure outside the boiling tube push the indicator // The higher atmospheric pressure push the indicator	1 1												
(b)	To absorb carbon dioxide	1												
(c)	Move inwards / towards the boiling tube	1												
(d)	Method : Use / (The gas is) Mixed with / Passed through lime water Result : Turns / change to cloudy / chalky / milky <i>* Notes: do not accept if student just write "lime water" only</i>	1 1	2											
	TOTAL		6											
3 (a)	(i) Protein (ii) Milk // Egg // Fish // Any suitable answer	1 1												
(b)	Brick red precipitate is formed	1												
(c)	Kwashiorkor	1												
(d)	(i) Stomach	1												
	(ii) amino acids	1												

	TOTAL		6
4 (a)	Endoskeletal / Endoskeleton system	1	
(b)	(i) Exoskeletal / Exoskeleton system (ii) Hydroskeletal / Hydroskeleton system	1 1	2
(c)	Buoyancy // Buoyancy of water	1	
(d)	(i) -Its skeletal system not able to support its huge body weight. -Its weight will crush its internal organ	1 1	2
	TOTAL		6
5(a)	(i) The stoma is closed during hot day while the stoma is opened during cool humid day.	1	
	(ii) - hot day – stoma closed to reduce excessive lost of water. - cool humid day - stoma is opened to allow the exchange of gasses.	1 1	2
(b)	Guard cell	1	
(c)	Control the closing and opening of the stoma / stomata	1	
(d)	(i) Transpiration	1	
(d)	(ii) It cools the plant // Get rid of excess water // Concentrate the sap in the plant // Set up a pulling force // Helps to draw water from the soil // Helps in the transportation of water and minerals in plant	1	
	(iii) Humidity // Temperature // Wind // Light // Surface area of leaves.	1	
	TOTAL		8
6(a)	(i) Permanent / irreversible increase in body size / number of cells / weight / change in body shape / function of organism	1	
	(ii) P : Infancy S : Adulthood	1 1	2
(b)	(i) X	1	
	(ii) Stage : Adolescence // R Reason : Female reach puberty earlier than male	1 1	2
(c)	- Carbohydrate - Teenagers are very active and need a lot of energy.	1 1	2
	TOTAL		8
7(a)	P : Series circuit Q : Series circuit R : Parallel circuit S : Series circuit	1 1 1 1	4

(b)	<div style="text-align: center;"> <div style="border: 1px solid black; width: 150px; height: 30px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">P, Q, R and S</div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <div style="border: 1px solid black; width: 100px; height: 80px; display: flex; align-items: center; justify-content: center;">Series circuit</div> <div style="border: 1px solid black; width: 100px; height: 60px; display: flex; align-items: center; justify-content: center; margin-top: 10px;">P, Q, S</div> </div> <div style="text-align: center;"> <div style="border: 1px solid black; width: 100px; height: 80px; display: flex; align-items: center; justify-content: center;">Parallel circuit</div> <div style="border: 1px solid black; width: 100px; height: 60px; display: flex; align-items: center; justify-content: center; margin-top: 10px;">R</div> </div> </div> </div> <p style="margin-left: 20px;">Common characteristics</p> <p style="margin-left: 20px;">Letter of circuit</p>	1 1 1 1	4																		
8(a)	55	1																			
(b)	<p>(i) Manipulated variable : Mass of load // Force exerted on the spring // Weight of load</p> <p>(ii) Responding variable : Position of the pointer // pointer reading // extension of spring</p> <p>(iii) Constant variable : Type of spring // initial reading of the pointer</p>	1 1 1	3																		
(c)	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 33%;">Mass of load /g</th> <th style="width: 33%;">Force /N</th> <th style="width: 33%;">Extension of spring /cm</th> </tr> </thead> <tbody> <tr> <td>100</td> <td style="color: red;">1</td> <td style="color: red;">2</td> </tr> <tr> <td>200</td> <td>2</td> <td>4</td> </tr> <tr> <td>300</td> <td>3</td> <td>6</td> </tr> <tr> <td>400</td> <td>4</td> <td>8</td> </tr> <tr> <td>500</td> <td>5</td> <td>10</td> </tr> </tbody> </table> <p style="margin-top: 10px;">Notes: 4 corrects = 3m 3 corrects = 2m 2 corrects = 1m 1 correct = 0m</p>	Mass of load /g	Force /N	Extension of spring /cm	100	1	2	200	2	4	300	3	6	400	4	8	500	5	10	1 1 1	3
Mass of load /g	Force /N	Extension of spring /cm																			
100	1	2																			
200	2	4																			
300	3	6																			
400	4	8																			
500	5	10																			

(d)	Refer to appendix 1: At least 3 points mark correctly = 1 mark The shape of graph is a straight line graph = 1 mark	1 1	2
(e)	(i) 9	1	1
	(ii) The extension of spring is directly proportional to the force exerted on it // The higher the force, the higher the extension of spring.	1	1
(f)	The increase in length when the load is exerted.	1	1
	TOTAL		12

APPENDIX 1

Extension of spring / cm

