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PEPERIKSAAN PERCUBAAN PMR TAHUN 2011

FORM THREE

MARKING SCHEME

SUBJECT CODE	**55 / 2**
SUBJECT	**SCIENCE**
PAPER	**TWO**

QUESTION *SOALAN*		ANSWER IN ENGLISH VERSION / *JAWAPAN DALAM VERSI BAHASA MELAYU*	MARK *MARKAH*
1	a.	Childhood 3 – 13 years Adolescent 13 – 20 years Adult 20 – 65 years	3 marks
	.b	i) P ii) The growth of sexes at the same rate (J) At the beginning of this stage the growth for girls is more than boy (L)	1 mark 2 marks
2	a.	Iron sulphide	1 mark
	b.	i) K ii) J, L, K iii) Magnesium, sulphur	1 mark 1 mark 1 mark
	c.	i) Magnesium oxide ii) Supply oxygen	1 mark 1 mark
3	a.	i) to filter blood ii) pelvis	1 mark 1 mark
	b.	Transplant kidney, haemodialisys	1 mark
	c.	i) to treat kidney failure patient/ remove waste product from the blood filter blood. ii) Can iii) Blood can filter even by one kidney.	1 mark 1 mark 1 mark
4	a	i)  ii) chlorophyll	1 mark 1 mark
	b	Q→P →R→S	1 mark

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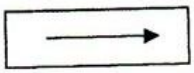
	c	i) Put water weeds/plants ii) Water weeds/plants undergo **photosynthesis** and produce **oxygen** for the fish	1 mark 2 marks
5	a.	i)  ii) Black dull surface is a good absorber of heat.	1 mark 1 mark
	b.	Less hot Bright color is good reflector of heat/poor absorber of heat.	1 mark 1 mark
	c.	i) Heat content in Q is more than P ii) Type of surface: Dull black surface Or White shinny surface — Characteristic: Good radiation of heat or poor radiator of heat iii) increase poor heat radiator/heat not release efficiently	1 mark 1 mark 1 mark 1 mark
6	a.	i) Live wire carries electric current to the house while neutral wire carries electrical current from the house.	1 mark
	b.	i) House A – single phase House B –three phase ii) House A – use one air conditioner only/used less electric current/voltage 240 V House B – use more air conditioner/ used more electric current/415 V	1 mark 1 mark
	c.	i) Q ii) 1.5 A	1 mark 1 mark
	d.	Electrical fire/ short circuit.	1 mark
7	a	i) Output voltage J 14 L 8	2 marks
		ii) Transformer K is to increase output voltage but transformer L is to decrease output voltage.	1 mark
		iii) If the number of turns on secondary coil increase, the output voltage will increase.	1 mark
		iv) Output voltage is increase because number of turns on primary coil is lower than secondary coil	1 mark

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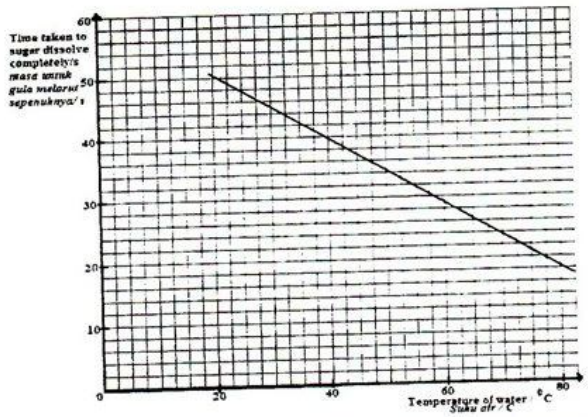
	b	Manipulated Variable - number of turns on secondary coil Responding Variable – Output voltage	2 marks
	c	U = 15.9V	1 mark
	d	Step up transformer - P Step down Transformer - R, S, Q	2 mark
8	a	R : 30 S : 20	1 mark 1 mark
	b	Time taken to sugar dissolve completely in beaker Q is faster than P/ *vice versa*	1 mark
	c	Time taken to sugar dissolve completely in beaker Q is faster because the temperature is higher / *vice versa*	1 mark
	d		2 marks
	e	The higher the temperature, the lower the time taken to dissolve sugar completely	1 mark
	f	MV : temperature of water RV : time taken to dissolve sugar completel	2 marks
	g	Solubility of sugar is the time taken to dissolve sugar completely	1 mark