

SKEMA PEMARKAHAN UD FIZIK KERTAS 2

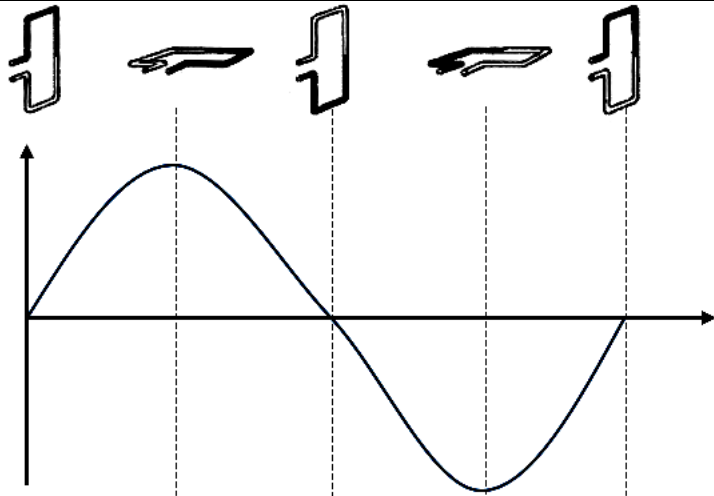
KERTAS 2

Question	Answer	Mark
1(a)	The change in temperature of an object // perubahan suhu suatu objek	1
1(b)	More sensitive // lebih peka	1
1(c)	Expansion of the mercury / Increase in the volume of the mercury when the temperature increases.// Pengembangan merkuri / Pertambahan isi padu merkuri apabila suhu bertambah	1
1(d)	Does not stick to the wall / not vapourise / opaque and easy to seen / good conductor / high boiling point // tidak melekat pada dinding kaca/ tidak mengewap/legap dan mudah dilihat/ ia adalah konduktor haba yang baik / mempunyai takat didih yang tinggi	1
Total		4

Question	Answer	Mark
2(a)	Gravitational Potential Energy // Tenaga Keupayaan Graviti	1
2(b)(i)	M1 $W = F \times s = 80 \times 0.5$ M2 = 40 J	1 1
2(b)(ii)	M1 $P = W/t = 40 \text{ J} / 4 \text{ s}$ M2 $P = 10 \text{ W}$	1 1
Total		5

Question	Answer	Mark
3(a)	Pascal's principle / Prinsip Pascal	1
3(b)	Same / sama	1
3(c)(i)	M1 : $P = \frac{50}{0.04}$ M2 : 800 Pa	1 1
3(c)(ii)	M1 : $F = P A = 800 \times 0.8$ M2 = 640 N	1

3(d)	increase / bertambah	1
Total		6

Question	Answer	Mark
4(a)(i)	Current produced due to cutting / changing of magnetic field // Arus yang dihasilkan disebabkan oleh perubahan / pemotongan medan magnet	1
4(a)(ii)	There is cutting of magnetic field // Terdapat pemotongan medan magnet	1
4(b)(i)	North // utara	1
4(b)(ii)	Diagram // rajah	1
4(b)(iii)	Lenz's law // hukum Lenz	1
4(c)	 <p>Note: Vertical position of coil- $V = 0$ amplitude (1M) Horizontal position of coil- $V = \text{max (+ve)}$ or max (-ve) amplitude (1M)</p>	1 1
Total		7

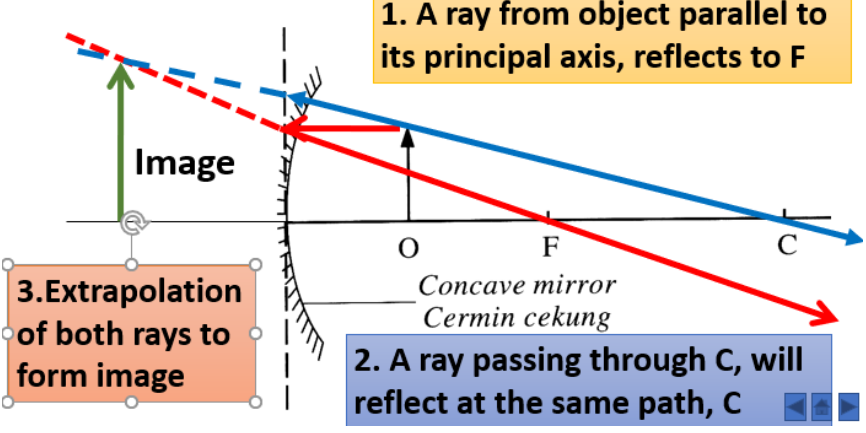
Question	Answer	Mark
5(a)	Heat is a form of energy // Tenaga ialah satu bentuk tenaga	1
5(b)(i)	$5.2 > 5.1$	1
5(b)(ii)	$5.2 > 5.1$	1
5(b)(iii)	Volume / Isipadu	1
5(c)	Directly proportional // berkadar terus	1
5(d)	Charles' law // hukum Charles	1

5(e)(i)	Absolute zero // Sifar mutlak	1
5(e)(ii)	Volume of air is zero // the air molecules is at rest //kinetic energy is zero // isipadu udara sifar // molekul udara pegun // tenaga kinetik sifar	1
Total		8

Question	Answer	Mark
6.a	Diode // Diod	1
6.b.i	The capacitance of the capacitor in Diagram 6.3 is higher // $6.3 > 6.2$	1
6.b.ii	The smoothness of wave pattern in Diagram 6.3 is higher // $6.3 > 6.2$	1
6.b.iii	The magnitude of peak voltage, V_P same // sama	1
6.b.iv	capacitance of the capacitor increases, the smoothness of wave pattern increases // Nilai kapasitans bertambah, semakin rata corak gelombang	1
6.c	Full-wave rectification / Rektifikasi penuh gelombang	1
6.d	M1 Capacitor is charged when the current flow // kapasitor dicaskan apabila arus mengalir. M2 Capacitor is discharged when there is no current flow // kapasitor buang cas apabila arus tidak mengalir	1 1
Total		8

Question	Answer	Mark
7(a)(i)	Series circuit // litar sesiri	1
7(a)(ii)	M1 $R = V/I = 3/1.5 = 2 \Omega$ M2 $R = 2/2 = 1 \Omega$	1 1
7(a)(iii)	Increases // bertambah	1
7(b)(i)	M1 240 V M2 Voltage same with appliances rating / appliances at normal working/ <i>voltan sama spesifikasi alat / alat bekerja secara normal</i>	1 1
7(b)(ii)	M1: Parallel // selari M2: One not working, others still work/ <i>satu tidak berfungsi, alat lain masih berfungsi</i>	1 1
7(b)(iii)	M1: Thick wire // dawai tebal M2: Low resistance // rintangan rendah	1 1
Total		10

Question	Answer	Mark
8(a)	Reflection // pantulan	1

8(b)(i)	 <p>1. A ray from object parallel to its principal axis, reflects to F</p> <p>2. A ray passing through C, will reflect at the same path, C</p> <p>3. Extrapolation of both rays to form image</p> <p>Concave mirror Cermin cekung</p>	1 1 1
8(b)(ii)	Bigger/ virtual/ besar/ maya/ tegak	1
8(c)(i)	M1 Convex mirror / kanta Cembung M2 Wider view / Sudut pandangan lebih besar	1 1
8(c)(ii)	M1: Bigger size/ saiz lebih besar M2: Reflect more light / lebih banyak cahaya dipantul	1 1
8(c)(iii)	M1: High / tinggi M2: No barrier / tiada halangan	1 1
8(d)	S	
Total		12

Bahagian B

Question	Answer	Mark
9(a)(i)	situation where the rate of heat transfer between two objects is zero and the temperature of both objects is the same, / keadaan dimana kadar pemindahan haba bersih antara dua objek adalah sifar dan kedua-dua objek mempunyai suhu yang sama.	1
9(a)(ii)	M1 : specific heat capacity of frying pan M is greater than N / muatan haba tentu kuali M lebih besar dari kuali N	1
	M2 : time taken for the water to boil in M is longer than N / masa untuk mendidihkan air oleh kuali M lebih panjang dari kuali N	1
	M3 : Change in temperature in M and N are the same / Perubahan suhu dalam kuali M dan N adalah sama	1
	M4 : specific heat capacity increase, the time taken for the water to boil increase. / Semakin besar muatan haba tentu semakin panjang masa yang diambil untuk air mendidih	1
	M5 : specific heat capacity increase, the rate of change of temperature decrease / Semakin besar muatan haba tentu, semakin kecil kadar perubahan suhu.	1

9(b)	<p>M1 Steam cannot goes out because of the steamer is closed. // Stim tidak dapat keluar kerana periuk kukus ditutup</p> <p>M2 The steam condensed on the fish // Stim mengalami kondensasi ke atas ikan</p> <p>M3 The fish absorbs specific latent heat of fusion from the condensed steam // Ikan menyerap haba pendam tentu pengewapan dari stim yang terkondensasi tadi.</p> <p>M4 Water has high specific latent heat</p> <p>M5 Fish can be cook faster // ikan boleh masak dengan cepat</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>Max 4</p>
9(c)	<p>M1 : the pot is made by the material that have lower spesific heat capacity/ <i>Periuk di perbuat dari bahan yang mempunyai muatan haba tentu yang rendah.</i></p> <p>M2 : cepat panas</p> <p>M3 : wall of the pot is thicker /<i>Dinding periuk yang tebal</i></p> <p>M4 : Windstand higher pressure /<i>Dapat menahan tekanan yang tinggi</i></p> <p>M5 : the lid must have a rubber layer / <i>Penutup periuk ada lapisan getah</i></p> <p>M6 : Avoid the leakage of steam / <i>Dapat mengelakkan kebocoran stim</i></p> <p>M7 : the handle is made by the material with insulator / <i>Pemegang diperbuat dari bahan penebat</i></p> <p>M8 : Higher spesific heat capacity / <i>muatan haba tentu yang tinggi / Tidak cepat panas</i></p> <p>M9 : lower mass of the pot/<i>jisim periuk yang rendah</i></p> <p>M10 : lighter , easy to carry / <i>Ringan, mudah dibawa ke mana-mana.</i></p> <p>M11 : must have pressure released valve / <i>Mesti mempunyai injap pelepas tekanan</i></p> <p>M12 : to released high pressure after cooking / <i>unuk mengeluarkan wap panas bertekanan tinggi apabila selesai memasak.</i></p> <p><i>Semak bebas</i></p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>Max 10</p>
Total		20

Question	Answer	Mark
10(a)	<p>Radioactive decay is the process in which an unstable nucleus becomes stable by emitting radioactive rays.</p> <p><i>Reputan radioaktif adalah proses di mana satu nukleus yang tidak stabil menjadi stabil dengan mengeluarkan sinaran radioaktif.</i></p>	1
10(b)	<p>M1 : Initial activity is the same // Aktiviti asal sama</p> <p>M2 : Time interval: $10.2 > 10.1$ <i>Sela masa aktiviti: $10.2 > 10.1$</i></p> <p>M3 : Rate of decay: $10.2 < 10.1$ <i>Kadar penyusutan radioaktif: $10.2 < 10.1$</i></p> <p>M4 : The higher the rate of decay, the shorter time interval // Semakin tinggi kadar penyusutan, semakin pendek sela masa</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p>

	M5 : The shorter the half life, the higher the rate of decay // Semakin pendek separuh hayat, semakin tinggi kadar penyusutan.	1
10(c)	<p>M1 : Alpha particles have the weakest penetration power <i>Zarah-zarah alfa mempunyai kuasa penembusan yang paling lemah</i></p> <p>M2 : Alpha particles have a range of a few cm in air. <i>Zarah-zarah alfa mempunyai julat beberapa cm dalam udara.</i></p> <p>M3 : They cannot pass through the body tissues of the patient, therefore cannot be detected outside the body. <i>Zarah-zarah alfa tidak boleh melalui tisu badan pesakit, maka tidak boleh dikesan di luar badan.</i></p> <p>M4 : The power of ionisation of alpha particles is very high and may destroy human cells. <i>Zarah-zarah alfa mempunyai kuasa pengionan yang lebih tinggi dan akan memusnahkan sel manusia.</i></p>	1 1 1 1
10(d)	<p>M1 : Gamma rays are used as they have the highest penetration power but lowest ionisation power. <i>Sinaran gama digunakan kerana mempunyai kuasa penembusan yang paling tinggi tetapi kuasa pengionan yang paling rendah.</i></p> <p>M2 : They have high energy and can kill cancer cells. <i>Mempunyai tenaga tinggi dan boleh membunuh sel-sel kanser.</i></p> <p>M3 : Use MRI, X-ray or CT scans to locate the exact positions of cancer cells <i>Menggunakan MRI, sinar-X atau CT scans untuk menentukan kedudukan tepat sel kanser</i></p> <p>M4 : Identify the positions of cancer cells correctly <i>Mengenal pasti kedudukan sel kanser dengan betul</i></p> <p>M5 : To target gamma radiation accurately on the cancer cells <i>Menujukan sinaran gama dengan tepat ke atas sel kanser</i></p> <p>M6 : To avoid destroying other living cells <i>Untuk mengelakkan pemusnahan sel-sel hidup yang lain</i></p> <p>M7 : The dosage of the ray required is moderate and sufficient. <i>Dos sinaran yang diperlukan adalah sederhana dan mencukupi</i></p> <p>M8 : If the dosage is low, not all the cancer cells will be destroyed <i>Jika dos adalah rendah, bukan semua sel kanser akan dimusnahkan</i></p> <p>M9 : If the dosage is high, other cells will be destroyed. <i>Jika dos adalah tinggi, sel-sel yang lain akan dimusnahkan.</i></p> <p>M10 : The time of exposure to the rays is not too long. <i>Masa pendedahan kepada sinar tidak boleh terlalu lama.</i></p> <p>M11 : To prevent other healthy cells from being destroyed. <i>Untuk mengelakkan sel-sel sihat yang lain daripada dimusnahkan</i></p>	1 1 1 1 1 1 1 1 1 1 1 1
		Max 10

Total	20
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Bahagian C

Question	Answer	Mark								
11(a)	Rate of change of momentum // kadar perubahan momentum Force act in a short time interval during collision or explosion // daya yang bertindak dalam masa yang singkat ketika perlanggaran atau letupan	1								
11(b)	M1 Impulsive force \propto to 1/time // Impulsive force inversly proportional to time of impact M2 To increase the time of impact // tambah masa tindak balas M3 To reduce impulsive force M4 Helmet – to protect the head / melindungi kepala M5 Jacket – to protect the body / melindungi badan	1 1 1 1 1 Max 4								
11(c)(i)	M1 : $\frac{160 \times 1000}{3600} = 44.44 \text{ m/s}$	1								
11(c)(ii)	M1 $a = \frac{v - u}{t} = \frac{44.44 - 0}{10}$ M2 $a = 4.44 \text{ m s}^{-2}$	1 1								
11(c)(iii)	M1 $F = ma = 202 \times 4.44$ M2 $F = 896.88 \text{ N}$	1 1								
11(d)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">CHARACTERISTICS</th> <th style="width: 50%;">REASON</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">With ABS Dengan ABS</td> <td>Motorcycle does not stop immediately/ can be controlled if direction changes/ does not move sideways / more friction with ABS. // motorsikal tidak berhenti secara tiba-tiba / boleh mengawal perubahan arah / lebih geseran / cengkaman</td> </tr> <tr> <td style="text-align: center;">Bigger with of tyre Tayar besar</td> <td>Bigger surface area, better support / low pressure acts on the tyres/ more friction when breaks. // luas permukaan lebih besar / sokongan lebih baik // tekanan rendah ke atas tayar // lebih geseran bila membrek</td> </tr> <tr> <td style="text-align: center;">Smaller mass Jisim kecil</td> <td>Lighter, can move faster / low inertia. // ringan / boleh bergerak laju // inersia</td> </tr> </tbody> </table>	CHARACTERISTICS	REASON	With ABS Dengan ABS	Motorcycle does not stop immediately/ can be controlled if direction changes/ does not move sideways / more friction with ABS. // motorsikal tidak berhenti secara tiba-tiba / boleh mengawal perubahan arah / lebih geseran / cengkaman	Bigger with of tyre Tayar besar	Bigger surface area, better support / low pressure acts on the tyres/ more friction when breaks. // luas permukaan lebih besar / sokongan lebih baik // tekanan rendah ke atas tayar // lebih geseran bila membrek	Smaller mass Jisim kecil	Lighter, can move faster / low inertia. // ringan / boleh bergerak laju // inersia	1 1 1 1
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		rendah		1 1
	Lower seat height Tinggi tempat duduk rendah	Lower centre of gravity/ more stable/ safer when turn // pusat graviti rendah // lebih stabil // selamat bila membelok.		1 1
	R : Brake with ABS, bigger tyre, smaller mass, lower seat height Brek dengan ABS, tayar besar, jisim kecil, tempat duduk rendah			
			Total	20

Question	Answer	Mark									
12(a)	Number of complete oscillation in one second Bilangan ayunan lengkap dalam masa satu saat	1									
12(b)	M1 Pendulum B and X has the same length // bandul B dan X sama Panjang M2 So both have same frequencies / kedua-duanya mempunyai frekuensi sama M3 When X is displaced, all pendulums start to oscillate Bila X disesarkan, bandul-bandul lain turut berayun M4 energy is transferred // tenaga dipindahkan M5 Pendulum X and B are in resonance // Bandul X dan B berada dalam keadaan resonans M6 Pendulum B oscillates with the maximum amplitude // Bandul B berayun dengan amplitud maksimum	1 1 1 1 1 1 1 Max 4									
12(c)	<table border="1"> <thead> <tr> <th>CHARACTERISTICS</th> <th>REASON</th> </tr> </thead> <tbody> <tr> <td>Large diameter Diameter besar</td> <td>More signals are received Banyak maklumat diterima</td> </tr> <tr> <td>Microwave / gelombang mikro</td> <td>High frequency / frekuensi tinggi High energy / tenaga tinggi</td> </tr> <tr> <td>Distance of receiver from disc is same with focal</td> <td>Signals are focused at the receiver // isyarat ditumpukan pada titik</td> </tr> </tbody> </table>		CHARACTERISTICS	REASON	Large diameter Diameter besar	More signals are received Banyak maklumat diterima	Microwave / gelombang mikro	High frequency / frekuensi tinggi High energy / tenaga tinggi	Distance of receiver from disc is same with focal	Signals are focused at the receiver // isyarat ditumpukan pada titik	1 1 1
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		1									

	length Jarak antara penerima dari cakera ialah panjang gelombang	fokus di penerima		1
	Height of the disc is high // cakera di tempat tinggi	No blockage // tiada halangan		1 1
	R: Large diameter , use microwave, distance of receiver from disc is same with focal length, at high position // diameter besar, guna gelombang mikro, jarak penerima dari cakera ialah panjang gelombang dan di tempat tinggi.			1 1
12(d)(i)	$s = \frac{vt}{2}$ $= \frac{1\,500 \times 0.12}{2}$ $= 1\,500 \times 0.06$ $= 90 \text{ m}$			1 1 1
12(d)(ii)	$\lambda = \frac{v}{f}$ $= \frac{1\,500}{25\,000}$ $= 0.06 \text{ m}$			1 1
			Total	20

SKEMA FIZIK KERTAS 3
UJIAN DIAGNOSTIK 2 NEGERI MELAKA 2020

Section A

NO	MARKING CRITERIA	MARK	
		SUB	TOTAL
1(a)	(i) State the manipulated variable correctly - Time / Masa	1	1
	(ii) State the responding variable correctly - Temperature // Increase in temperature suhu // kenaikan suhu	1	1
	(iii) State the constant variable correctly - Mass of the water // power of the heater - jisim air // kuasa pemanas	1	1

(b) State the value of θ_0 within the acceptable range
 $\theta_0 = 25\text{ }^\circ\text{C}$

1

1

(c) (i) Record the readings of θ correctly
 All five readings of θ correct

1

1

(ii) Tabulate the results for t , θ and $\Delta\theta$ correctly

t / s	$\theta / \text{ }^\circ\text{C}$	$\Delta\theta / \text{ }^\circ\text{C}$
20	32	7
40	39	14
60	46	21
80	53	28
100	60	35

Give a tick (✓) based on the following:

- A • Columns t , θ and $\Delta\theta$
- B • Correct units for t , θ and $\Delta\theta$
- C • All 5 values of θ correct

✓

✓

- D • All 5 values of $\Delta\theta$ correct
 [Note : 3 or 4 values of $\Delta\theta$ correct : ✓]

✓

✓✓

- E • All values of θ and $\Delta\theta$
 written as whole numbers or
 consistent to $0.5\text{ }^\circ\text{C}$.

✓

Marks awarded :

Number of ✓	Marks
6 ✓	5
5 ✓	4
3 - 4 ✓	3
2 ✓	2
1 ✓	1

5

5

(d) Draw a complete graph of $\Delta\theta$ against t

Give a tick (✓) based on the following:

- A • $\Delta\theta$ at the y -axis, t at the x -axis
- B • Correct units at both axes
- C • Uniform scale at both axes
- D • 5 points plotted correctly
 [Note : 4 points plotted correctly : ✓]
- E • Line of best fit is drawn
- F • Minimum size of graph 5×4 big squares

✓

✓

✓

✓✓

✓

✓

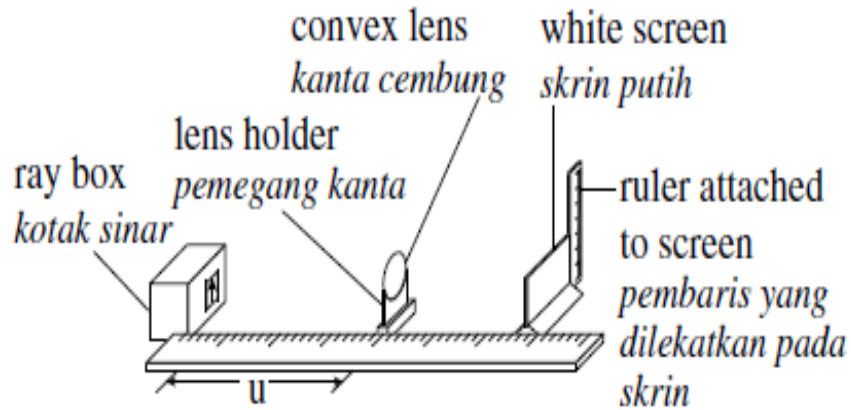
(Big square : $2\text{ cm} \times 2\text{ cm}$)
 (From the origin to the last point)

(e)	Marks awarded :	5	5									
	<table border="1"> <tr> <th>Number of ✓</th> <th>Marks</th> </tr> <tr> <td>7 ✓</td> <td>5</td> </tr> <tr> <td>5-6 ✓</td> <td>4</td> </tr> <tr> <td>3-4 ✓</td> <td>3</td> </tr> <tr> <td>2 ✓</td> <td>2</td> </tr> <tr> <td>1 ✓</td> <td>1</td> </tr> </table>			Number of ✓	Marks	7 ✓	5	5-6 ✓	4	3-4 ✓	3	2 ✓
Number of ✓	Marks											
7 ✓	5											
5-6 ✓	4											
3-4 ✓	3											
2 ✓	2											
1 ✓	1											
	State the correct relationship between $\Delta\theta$ and t $\Delta\theta$ is directly proportional to t $\Delta\theta$ berkadar langsung dengan t	1	16									

Question	Answer	Mark	Total mark
2 (a)	(i) x directly proportional to $1/a$ // x is inversely proportional to a // x berkadar langsung dengan $1/a$ // x berkadar songsang dengan a	1	1
	(ii) If $a = 2.0$ m $1/a = \frac{1}{2} 0.5 \text{ m}^{-1}$ From the graph $x = 1.5$ m	1 1 1	3
	(iii) Draw a sufficient large triangle on the graph at least 6cm x 8cm (3 big squares x 4 big squares) Gradient = $\frac{(3.0 - 0)}{(1.2 - 0)}$ = 2.5 m^2 (correct unit)	1 1 1	3
(b)	$\lambda = \frac{ax}{D}$ = $\frac{2.5}{D}$ Gradient = $\frac{x}{a}$ = ax $\lambda = 2.5/5 = 0.5$ m (correct unit)	1 1 1 1	4
(c)	-This experiment is carried out in an open space to reduce the effect of reflection -Position of eye must be perpendicular to the reading of scale of meter rule to reduce parallax error -Eksperimen dijalankan dikawasan lapang untuk	1	1

		<i>mengurangkan kesan pantulan</i> <i>-Kedudukan mata berserenjang dengan skala bacaan</i> <i>pembaris meter untuk mengurangkan ralat paralaks</i>		
		Total mark		12

3	(a)	Inference: Height of image depends on object distance <i>Tinggi imej bergantung kepada jarak objek</i>	1	1
	(b)	Hypothesis: The height of image increases as the object distance decreases <i>Tinggi imej akan meningkat apabila jarak objek berkurang</i>	1	1
	(c) (i)	Aim of the experiment : To investigate the relationship between object distance and height of image <i>Untuk menyiasat hubungan antara jarak objek dengan tinggi imej</i>	1	1
	(ii)	Variables in the experiment: Manipulated variable: Object distance <i>Pembolehubah dimanipulasikan: Jarak objek</i> Responding variable: Height of image <i>Pembolehubah bergerak balas: Tinggi imej</i> Constant variable: Focal length of lens <i>Pembolehubah dimalarkan: Panjang fokus kanta.</i>	1 1 1	3
	(iii)	List of apparatus and materials: Ray box, metre rule, convex lens, lens holder, white screen and arrow on transparent paper <i>Kotak sinar, pembaris meter, kanta cembung, pemegang kanta, skrin putih dan anak panah pada kertas lutsinar .</i>	1	1
	(iv)	Arrangement of the apparatus:		1



1

(v)

Procedure:

– The apparatus is set up as shown in the diagram

Radas disediakan seperti rajah yang ditunjukkan

– Power supply is switched on

Bekalan kuasa dihidupkan

Method of controlling the manipulated variable

– Experiment is started with object distance 10.0 cm

Eksperimen dimulakan dengan jarak objek 10.0 cm

Method of measuring the responding variable.

– Screen is adjusted to get a sharp image

Skrin dilaraskan untuk mendapatkan imej yang tajam

– The height of image is measured using the metre rule

Tinggi imej diukur dengan pembaris meter

Repeat the experiment at least 4 times

– The experiment is repeated with object distance of 20.0 cm, 30.0 cm, 40.0 cm and 50.0 cm

Eksperimen diulang dengan jarak objek ialah 20.0 cm, 30.0 cm, 40.0 cm dan 50.0 cm

1

3

1


1

(vi)

Tabulating data

1

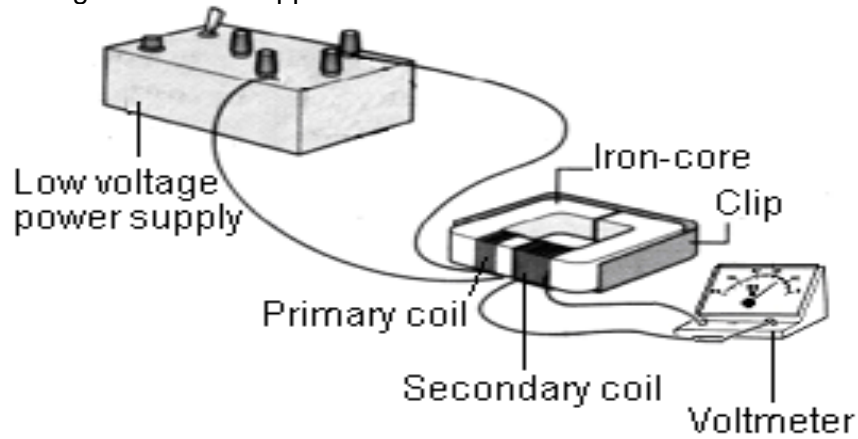
1

		Object distance <i>Jarak objek,</i> u/cm	Height of image, <i>Tinggi imej,</i> h/cm		
		10.0			
		20.0			
		30.0			
		40.0			
		50.0			
	(vii)	Analysing data		1	
					1
		OR stated : draw a graph h against u			
		TOTAL			12

4	(a)	Inference: The output voltage of the transformer depends on the number of turns of the secondary coil.	1	1
	(b)	Hypothesis: The output voltage of the transformer increases as the number of turns of the secondary coil increases	1	1
	(c)	Aim of the experiment :		
	(i)	To investigate the relationship between the number of turns of the secondary coil and output voltage of a transformer.	1	1
	(ii)	Variables in the experiment: Manipulated variable: the number of turns of the secondary coil, N_s Responding variable: The output voltage, V_s Fixed variable: number of turns of the primary coil // the input voltage.	1	2
			1	
	(iii)	List of apparatus and materials: low a.c power voltage, insulated copper wire, soft iron-core, a.c voltmeter	1	1

and connection wire.

(iv) Arrangement of the apparatus:



(v) Procedure:

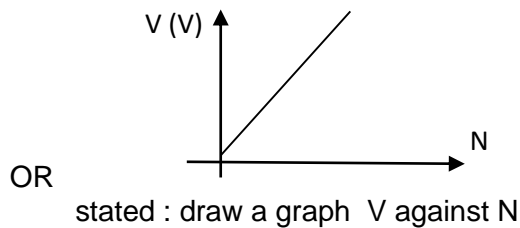
The number of turns of the primary coil $N_p = 200$ turns.
 The number of turns of the secondary coil $N_s = 20$ turns
 The low voltage of a.c power supply is switched on.
 The reading of the voltmeter is measured , V_s
 The experiment is repeated with $N_s = 40, 60, 80$ and 100 turns
 (accept : step-down transformer)

(vi)

Tabulating data

Number of turn of secondary coil, N_s	Output voltage, $(V_s) / V$
20	
40	
60	
80	
100	

(vii) Analysing data



TOTAL

12

