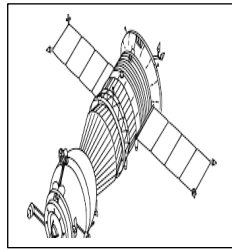


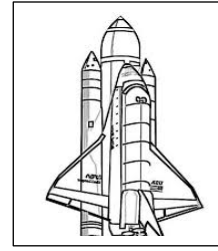
For
Examiner's
Use

- 1 (a) Diagram 1 shows two astronomical instruments, X and Y.
Name the astronomical instruments X and Y with the words given.
Rajah 1 menunjukkan 2 alat astronomi, X dan Y.
Namakan alat astronomi X dan Y tersebut dengan menggunakan perkataan yang diberi.

Satellite <i>Satelit</i>	Spaceship <i>Kapal angkasa</i>
-----------------------------	-----------------------------------



X:.....



Y:.....

1(a)
2

[2marks/markah]

- (b) Match the following types of satellites with their functions.
Padankan pelbagai satelit berikut dengan fungsinya.

Types of satellites <i>Jenis satelit</i>	Function <i>Fungsi</i>
Communication satellite <i>Satelit komunikasi</i>	For spying, security and defence of a country. • <i>Untuk perisikan, keselamatan dan pertahanan sesebuah negara.</i>
Military satellite <i>Satelit tentera</i>	Enable global services through the internet, telephone, radio and live telecast event anywhere on earth. • <i>Membolehkan perkhidmatan global melalui internet, telefon, radio dan siaran langsung peristiwa di mana-mana tempat di bumi.</i>

1(b)
2

[2marks/2markah]

Total
1
4

- 2 (a) Diagram 2 shows the position of the meniscus liquid in a measuring cylinder.

Rajah 2 menunjukkan kedudukan meniskus cecair dalam sebuah silinder penyukat.

For
Examiner
's Use

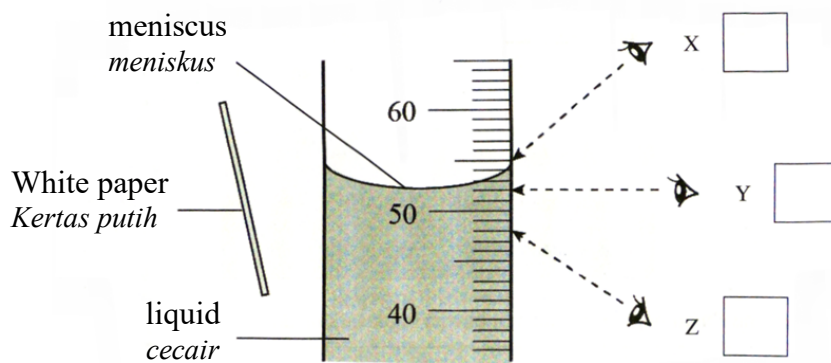


Diagram 2/Rajah 2

- (i) Tick (✓) on Diagram 2 to indicate the correct position of the eye to take the measurement of the measuring cylinder

Tandakan (✓) pada Rajah 2 untuk menunjukkan kedudukan mata yang betul untuk mengambil bacaan silinder penyukat

[1marks/markah]

- (ii) Mark (✓) on the correct statement of Diagram 2 above.

Tandakan (✓) pada pernyataan yang betul mengenai rajah 2 di atas.

The white paper is placed behind the measuring cylinder so that meniscus can be enlarged <i>Kertas putih diletakkan di belakang silinder penyukat supaya meniskus dapat diperbesarkan</i>		
The white paper is placed behind the measuring cylinder so that meniscus can be clearly seen <i>Kertas putih diletakkan di belakang silinder penyukat supaya meniskus dapat dilihat dengan jelas</i>		

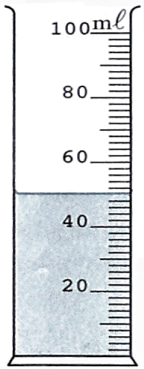
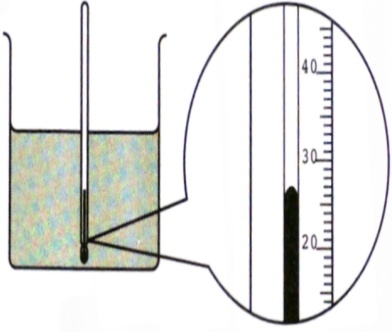
[1mark/markah]

1(a)(i)
1

2(a)(i)
1

For
Examiner's
Use

- 2 (b) Measure and write the readings of the following apparatus.
Ukur dan tulis bacaan radas berikut.

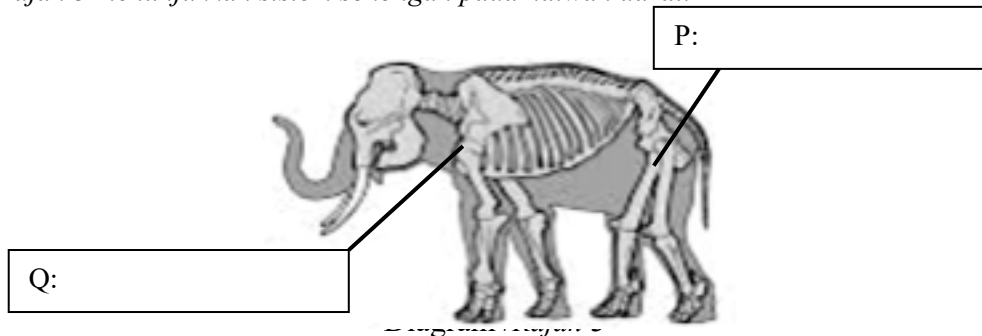
	
_____ ml	_____ °C

2(b)
2

[2marks/markah]

Total
2
4

- 3 Diagram 3 shows a support system in land animal.
Rajah 3 menunjukkan sistem sokongan pada haiwan darat.



- (a) Label P and Q in Diagram 3 using the words given below
Label P dan Q pada Rajah 3 menggunakan perkataan yang diberikan dibawah.

Pectoral girdle
Lengkungan pectoral

Cartilage
Tulang rawan

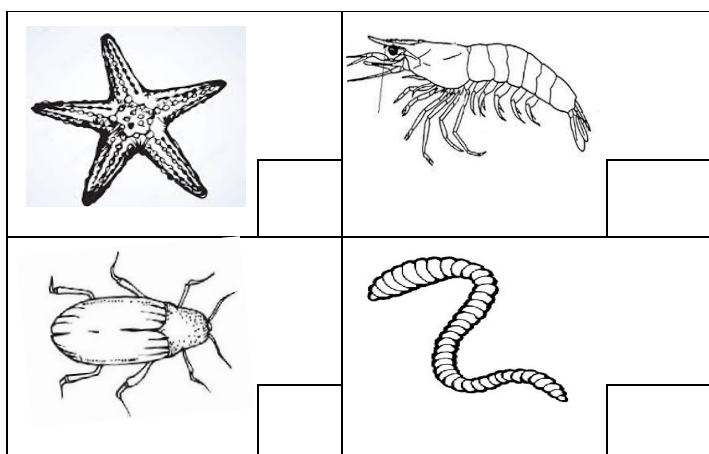
Pelvic girdle
Lengkungan pelvis

2marks/markah]

For
 Examiner's
 Use

3(a)	
	2

- (b) Invertebrate animals have two types of support system which are exoskeleton and hydrostatic skeleton.
 Mark (✓) for the animals which is classified into hydrostatic skeleton.
Haiwan invertebrata terdiri daripada dua jenis sistem sokongan iaitu rangka luar dan rangka hidrostatik.
 Tandakan (✓) bagi haiwan yang dikelaskan dalam kumpulan rangka hidrostatik.



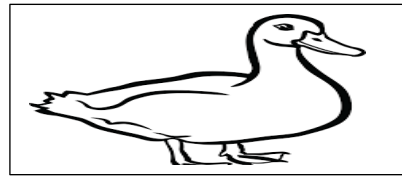
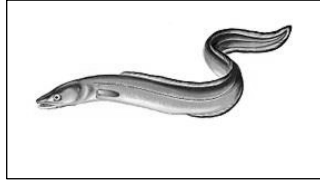
[2marks/markah]

3(b)	
	2

Total	
3	
	4

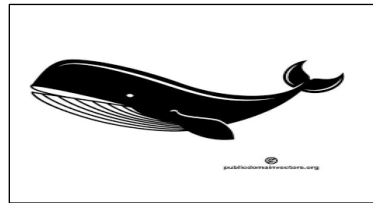
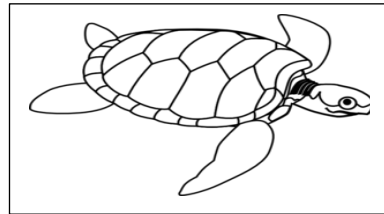
For
Examiner's
Use

- 4 Figure 4 shows several species of animals. Classify the animals either mammals, reptiles, birds or fish.
Rajah 4 menunjukkan beberapa jenis spesies haiwan. Kelaskan haiwan-haiwan tersebut samada mamalia, reptilia, burung atau ikan.



Class:.....
kelas:.....

Class :.....
kelas:.....



Class :.....
kelas:.....

Class :.....
kelas:.....

4
4

Total	
4	
	4

[[4marks/4markah]

- 5 (a) Diagram 5 shows a boy kicking a ball.
Rajah menunjukkan seorang budak lelaki sedang menendang bola.

For
Examiner's
Use



Diagram /rajah 5

Choose the type of force involve in the activity above.

Pilih jenis daya yang terlibat dalam aktiviti di atas.

Tandakan (✓) bagi jawapan yang betul.

Pushing
Tolakan

Pulling
Tarikan

[1marks/1markah]

5(a)
1

- (b) State **two** effect of force to the ball.
*Nyatakan **dua** kesan daya terhadap bola itu*

1:.....

1:.....

[2marks/2markah]

5(b)
2

For
Examiner's
Use

5(c)
1

- 5 (c) The Earth's gravitational force pulls all objects around it towards the centre of the earth.

Daya tarikan graviti Bumi menarik semua objek di sekitarnya ke arah pusat Bumi.

Give one benefits of the Earth gravitational force to human.

Berikan satu manfaat daya tarikan graviti Bumi kepada manusia

.....

- (d) Two magnet that place closer to one another will create a force of repulsion and a force of attraction.

Apabila dua magnet diletakkan berdekatan antara satu sama lain akan menghasilkan daya tolakan dan daya tarikan.

Write TRUE or FALSE in the space in the box below

Tulis BENAR atau PALSU didalam kotak di bawah

Statement/Pernyataan	TRUE/FALSE BENAR/PALSU
The force of repulsion between two magnet exists when two like poles are placed together. <i>Daya tolakan antara dua magnet wujud apabila dua kutub yang sama diletakkan bertentangan.</i>	
The force of attraction between two magnet exists when two like poles are placed together. <i>Daya tarikan antara dua magnet wujud apabila dua kutub yang sama diletakkan bertentangan.</i>	

[2marks/markah]

5(d)
2

Total	5
	6

- 6 Diagram shows the cross section of lung
Rajah menunjukkan keratan rentas satu bahagian peparu.

For Examiner's
Use

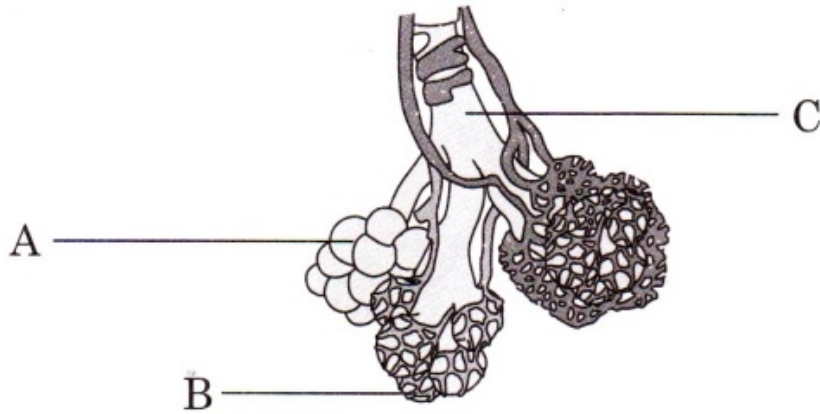


Diagram 6.1/rajaah 6.1

- (a) Name the parts labeled B and C
Namakan bahagian-bahagian yang berlabel B dan C

A: Alveolus

B :

C :

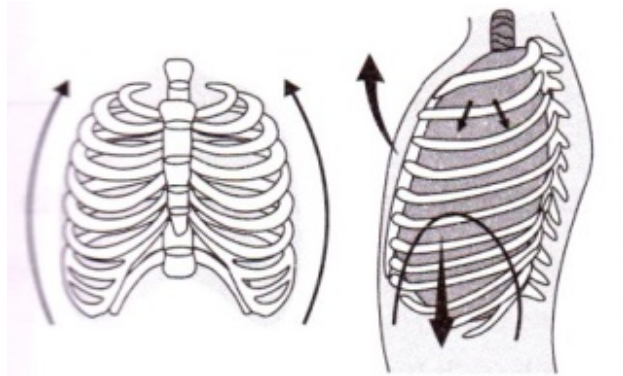
[2marks/markah]

6(a)
2

- (b) Based on Diagram 6.2 Arrange the steps in the table below to show the breathing in mechanism.

Berdasarkan rajah 6.2 susun langkah-langkah dalam jadual di bawah untuk menunjukkan proses menarik nafas berlaku.

Inhale process/Menarik nafas



Diagram/rajah 6.2

	Pressure inside the lung decrease <i>Tekanan udara dalam peparu berkurang</i>
	Diaphragm flatten. <i>Diafragma menjadi rata</i>
	Rib cage moves up and out. <i>Sangkar rusuk bergerak ke atas dan ke luar</i>
	Volume of thoracic cavity increase. <i>Isipadu rongga toraks bertambah</i>
5	Air enter into the lungs. <i>Udara masuk ke dalam peparu</i>

[2marks/markah]

6(b)
2

Draf

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6 (c) Diagram 6.3 shows the process of gaseous exchange that happens inside a lung.

Rajah 6.3 menunjukkan proses pertukaran gas yang berlaku dalam peparu.

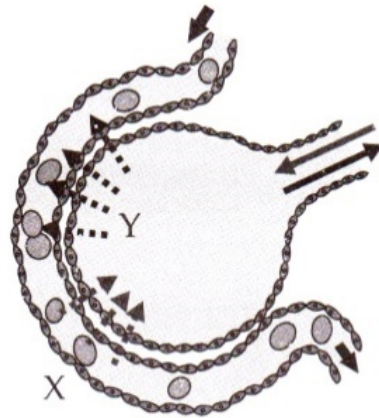


Diagram /*rajah* 6.3

What are gases X and Y?

Apakah gas X dan Y?

X: _____

Y: _____

[2marks/markah]

6(c)
2

Total
6
6

- 7 (a) Which of the following resources are renewable energy resource?
Antara berikut yang manakah merupakan sumber tenaga boleh diperbaharui?

Tick (✓) the correct answer.
Tandakan (✓) pada jawapan yang betul.

Biomass <i>Biojisim</i>	
Nuclear substances <i>Bahan-bahan nuklear</i>	
Fossil fuel <i>Bahan api fosil</i>	
Geothermal <i>Geoterma</i>	

[2marks/markah]

7(a)
2

- (b) Diagram 7.1 shows an object that uses energy to move.
Rajah 7.1 menunjukkan satu alat yang menggunakan tenaga untuk bergerak.



Diagram /rajah 7.1

- Name the source of energy uses by the object in diagram 7.1?
Namakan sumber tenaga yang digunakan oleh objek dalam rajah 7.1?

.....

[1mark/markah]

7(b)
1

For
Examiner's
Use

7 (c) Diagram 7.2 shows two types of resources used in the power stations for the generator of electricity.

Rajah 7.2 menunjukkan dua sumber tenaga yang digunakan oleh penjanaan elektrik.



(i) Wind turbine power station
Stesen janakuasa angin



(ii) Solar power plant
Stesen janakuasa solar

(i) State one advantage of using the energy sources in the above diagram.

Nyatakan satu kebaikan dalam penggunaan sumber tenaga yang ditunjukkan dalam rajah di atas.

7(c)	
	1

.....
[1mark/markah]

(ii) You as an engineer are toldeed to build a power station. Which one is suitable to build at Malaysia. Justify your answer

Anda sebagai seorang jurutera dikehendaki membina sebuah janakuasa. Yang mana sesuai dibina di Malaysia? Wajarkan jawapan anda.

7(c)(ii)	
	2

.....
.....

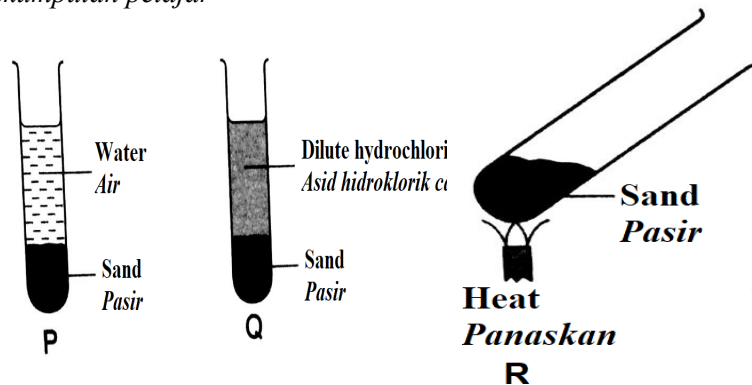
Total	
7	
	6

Draf

8	<p>Silicon is the second most common mineral in the Earth crust. <i>Silikon merupakan mineral kedua terbanyak dalam kerak bumi</i></p> <table border="1" data-bbox="236 365 1011 510"> <tr> <td data-bbox="236 365 411 510"> <p>Silicon <i>Silikon</i></p> </td> <td data-bbox="411 365 587 510"> <p>silicate <i>Silikat</i></p> </td> <td data-bbox="587 365 852 510"> <p>Calcium carbonate <i>Kalsium karbonat</i></p> </td> <td data-bbox="852 365 1011 510"> <p>Silica <i>Silika</i></p> </td> </tr> </table>		<p>Silicon <i>Silikon</i></p>	<p>silicate <i>Silikat</i></p>	<p>Calcium carbonate <i>Kalsium karbonat</i></p>	<p>Silica <i>Silika</i></p>	For Examiner's Use	
<p>Silicon <i>Silikon</i></p>	<p>silicate <i>Silikat</i></p>	<p>Calcium carbonate <i>Kalsium karbonat</i></p>	<p>Silica <i>Silika</i></p>					
	(a)	<p>Complete the following statements using the words given above. <i>Lengkapi pernyataan berikut menggunakan perkataan yang diberi atas.</i></p>		<table border="1" data-bbox="1230 712 1321 801"> <tr> <td colspan="2" data-bbox="1230 712 1321 745">1(a)</td> </tr> <tr> <td data-bbox="1230 745 1278 801"></td> <td data-bbox="1278 745 1321 801">1</td> </tr> </table>	1(a)			1
1(a)								
	1							
	i	<p>_____ is a silicon dioxide consisting of silicon and oxygen. <i>_____ ialah silikon dioksida yang terdiri daripada silikon dan oksigen.</i></p>		<table border="1" data-bbox="1209 884 1300 974"> <tr> <td colspan="2" data-bbox="1209 884 1300 918">1(a)</td> </tr> <tr> <td data-bbox="1209 918 1257 974"></td> <td data-bbox="1257 918 1300 974">1</td> </tr> </table>	1(a)			1
1(a)								
	1							
	ii	<p>_____ is a silicon compound consisting of silicon, metal and oxygen. <i>_____ ialah sebatian silikon yang terdiri daripada silikon, logam dan oksigen.</i></p>						

8 (b) (i) The diagram 8.1 below shows an activity carried out by a group of student.

Rajah 8.1 di bawah menunjukkan satu aktiviti yang dijalankan oleh sekumpulan pelajar



The following table shows the result of the activity.

Jadual berikut menunjukkan keputusan aktiviti berikut.

Activity <i>Aktiviti</i>	Observation <i>Pemerhatian</i>
P	Sand does not dissolve in water. <i>Pasir tidak melarut dalam air.</i>
Q	Sand does not react with hydrochloric acid. <i>Pasir tidak bertindak balas dengan asid hidroklorik.</i>
R	No reaction occurs. <i>Tiada tindak balas berlaku.</i>

Predict what would happens when the sand is replaced with clay in the activity.

Ramalkan apa yang akan berlaku jika pasir digantikan dengan tanah liat dalam aktiviti tersebut.

(a) P : _____

(b) Q : _____

1(a)
1

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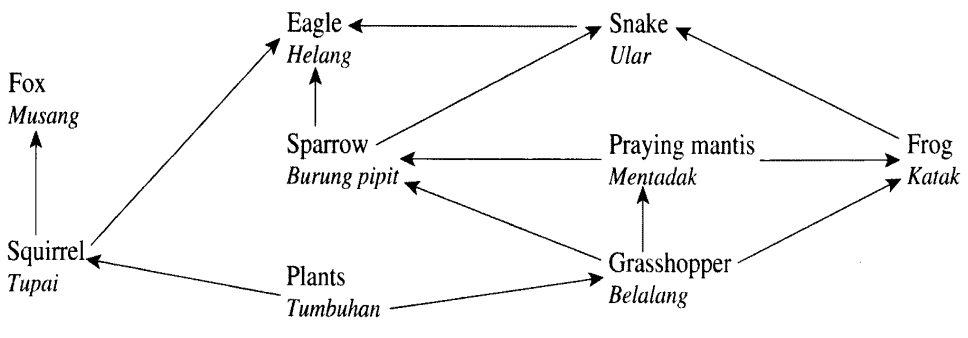
8 (c) Silicon compounds have many uses in everyday life. Explain the use of silicon compounds specified below:

*Sebatian silikon mempunyai pelbagai kegunaan dalam kehidupan seharian.
Jelaskan kegunaan sebatian silikon yang dinyatakan di bawah*

i) Asbestos/Asbestos :.....

ii) Clay / tanah liat :.....

8(c)
2


<p>9</p>	<p>A food web in a forest ecosystem is shown in Diagram 9.1 <i>Suatu siratan makanan dalam ekosistem sebuah hutan ditunjukkan dalam Rajah 9.1</i></p>  <p style="text-align: center;">Diagram /rajah 9.1</p>	<p>For Examiner's Use</p>		
<p>(a)</p>	<p>Name two the organisms that are tertiary consumers <i>Namakan dua organisma yang merupakan pengguna tertier.</i></p> <p>.....</p> <p style="text-align: right;">[2marks/markah]</p>	<p>9(a)</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px; text-align: center;">2</td> </tr> </table>		2
	2			
<p>(b)</p>	<p>Which population will most likely decrease immediately if more sparrows are introduced into this ecosystem? Give your reason. <i>Populasi yang manakah mungkin akan berkurang dengan cepat jika lebih banyak burung pipit masuk ke dalam ekosistem ini? Berikan sebab anda</i></p> <p>.....</p> <p>.....</p>	<p>9(b)</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px; text-align: center;">2</td> </tr> </table>		2
	2			


Total
9
8

<p>For Examiner's Use</p>	<p>9 (c)</p>	<p>The oil palm plantation is attacked by a type of pest known as rhinoceros beetles which affect the base of the palms fronds perforated and the young shoots that develop into fractures. Therefore, the operator of oil palm plantation puts an effort to overcome the problem by supplying fungus <i>Metarhizium anisopliae</i> at the oil palm plantation. The bar chart in Diagram 9.2 shows the population of oil palms and rhinoceros beetles before and after supplied fungus <i>Metarhizium anisopliae</i> at the oil palm plantation.</p> <p><i>Ladang kelapa sawit telah diserang oleh sejenis makhluk perosak bernama kumbang badak yang menyebabkan pangkal pelepah sawit berlubang dan pucuk muda yang berkembang patah. Oleh itu, pengusaha ladang sawit berusaha untuk mengatasi masalah tersebut dengan membekalkan kulat <i>Metarhizium anisopliae</i> di ladang sawit.</i></p> <p><i>Carta bar dalam Rajah 9.2 menunjukkan populasi kelapa sawit dan kumbang badak sebelum dan selepas dibekalkan kulat <i>Metarhizium anisopliae</i> di ladang kelapa sawit.</i></p>												
<p>10(a)</p> <p>1</p>		<p>The bar chart displays the population of three entities: Oil palm (A), Rhinoceros beetle (B), and Fungus <i>Metarhizium anisopliae</i> (C) at two different stages: 'Before' and 'After' treatment. The y-axis represents population levels. In the 'Before' stage, the population of oil palm (A) is high, while the population of rhinoceros beetle (B) is significantly lower. In the 'After' stage, the population of oil palm (A) has increased further, while the population of rhinoceros beetle (B) has decreased. Additionally, the population of fungus (C) is shown to be present and higher than in the 'Before' stage.</p> <table border="1"> <caption>Population Data from Diagram 9.2</caption> <thead> <tr> <th>Entity</th> <th>Before (Sebelum)</th> <th>After (Selepas)</th> </tr> </thead> <tbody> <tr> <td>A - Oil palm (Kelapa sawit)</td> <td>High</td> <td>Higher</td> </tr> <tr> <td>B - Rhinoceros beetle (Kumbang badak)</td> <td>Low</td> <td>Lower</td> </tr> <tr> <td>C - Fungus <i>Metarhizium anisopliae</i> (Kulat <i>Metarhizium anisopliae</i>)</td> <td>None</td> <td>Low</td> </tr> </tbody> </table>	Entity	Before (Sebelum)	After (Selepas)	A - Oil palm (Kelapa sawit)	High	Higher	B - Rhinoceros beetle (Kumbang badak)	Low	Lower	C - Fungus <i>Metarhizium anisopliae</i> (Kulat <i>Metarhizium anisopliae</i>)	None	Low
Entity	Before (Sebelum)	After (Selepas)												
A - Oil palm (Kelapa sawit)	High	Higher												
B - Rhinoceros beetle (Kumbang badak)	Low	Lower												
C - Fungus <i>Metarhizium anisopliae</i> (Kulat <i>Metarhizium anisopliae</i>)	None	Low												

9	(c)	(i)	<p>Based on the bar chart in Diagram 9.2, explain the changes in the population of oil palms and rhinoceros beetles.</p> <p><i>Berdasarkan carta bar dalam Rajah 9.2, jelaskan perubahan pada populasi kelapa sawit dan kumbang badak.</i></p> <p>.....</p> <p>.....</p> <p style="text-align: right;">[2marks/markah]</p>	<p>For Examiner's Use</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 80%;">9(c)(i)</td> <td style="width: 20%;"></td> </tr> <tr> <td></td> <td style="text-align: center;">2</td> </tr> </table>	9(c)(i)			2
9(c)(i)								
	2							
			<p>Explain how the method used gave positive impacts to the operator of oil palm plantation and the environment.</p> <p><i>Jelaskan bagaimana kaedah yang digunakan memberi kesan positif kepada pengusaha ladang sawit dan alam sekitar</i></p> <p>.....</p> <p>.....</p> <p>.....</p>	<table border="1" style="width: 100%;"> <tr> <td style="width: 80%;">9(c)(ii)</td> <td style="width: 20%;"></td> </tr> <tr> <td></td> <td style="text-align: center;">2</td> </tr> </table>	9(c)(ii)			2
9(c)(ii)								
	2							

Total 9	
	12

<p>For Examiner's Use</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 80%;">10(a)</td> <td style="width: 20%;"></td> </tr> <tr> <td style="width: 80%;"></td> <td style="width: 20%; text-align: center;">2</td> </tr> </table>	10(a)			2	10	<p>(a) Circle two natural resources from the following list . <i>Bulatkan dua sumber semulajadi daripada senarai berikut</i></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">Water <i>air</i></td> <td style="text-align: center;">Cans <i>tin minuman</i></td> <td style="text-align: center;">Plants <i>tumbuhan</i></td> <td style="text-align: center;">Nail <i>paku</i></td> </tr> </table> <p style="text-align: right;">[2mark/markah]</p>	Water <i>air</i>	Cans <i>tin minuman</i>	Plants <i>tumbuhan</i>	Nail <i>paku</i>
10(a)										
	2									
Water <i>air</i>	Cans <i>tin minuman</i>	Plants <i>tumbuhan</i>	Nail <i>paku</i>							
<table border="1" style="width: 100%;"> <tr> <td style="width: 80%;">10(b)</td> <td style="width: 20%;"></td> </tr> <tr> <td style="width: 80%;"></td> <td style="width: 20%; text-align: center;">2</td> </tr> </table>	10(b)			2		<p>(b) Aminah is cleaning her house. Diagram 10.1 shows that she wants to separate her waste. <i>Aminah sedang mengemas rumahnya. Rajah 10.1 menunjukkan dia ingin memisahkan bahan buangnya.</i></p> <div style="text-align: center;">  <p>Diagram/rajab 10.1</p> </div> <p>She know that incorrect disposal may cause problems. Give two ways how to conserve and help the environment <i>Aminah tahu bahawa pelupusan sisa buangan yang tidak sesuai boleh menimbulkan masalah. Berikan dua cara bagaimana untuk memelihara dan untuk membantu alam sekitar</i></p> <p>.....</p> <p>.....</p> <p style="text-align: right;">[2marks/markah]</p>				
10(b)										
	2									

10	(c)	(i)	<p>The diagram 10.2 show the location that Aminah and her family have their picnic. That beach was filled with former polystyrene.</p> <p><i>Rajah 10.2 menunjukkan lokasi Aminah dan keluarganya berkelah di pantai. Pantai ini dipenuhi dengan bekas polistirena</i></p>  <p style="text-align: center;"><i>Diagram/rajah 10.2</i></p> <p>State two effects on the dumping of polystyrene containers to the environment.</p> <p><i>Nyatakan dua kesan pembuangan bekas polistirene terhadap alam sekitar.</i></p> <p>.....</p> <p>.....</p> <p style="text-align: right;">[2marks/markah]</p>
		(ii)	<p>Suggest two other materials that can replace the usage of polystyrene containers</p> <p><i>Cadangkan dua bahan lain yang boleh menggantikan bekas polistirene.</i></p> <p>.....</p> <p>.....</p> <p style="text-align: right;">[2marks] [2markah]</p>

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10(c)(ii)
2

10(c)(ii)
2

Total
10
8

Trial perlis 2018

For Examiner's Use	1	(a)	(i)			For Examiner's Use
<div style="border: 1px solid black; padding: 2px; width: fit-content;">1(a)</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-left: 20px;">1</div>					[1marks] [1markah]	<div style="border: 1px solid black; padding: 2px; width: fit-content;">1(a)</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-left: 20px;">1</div>
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						<div style="border: 1px solid black; padding: 2px; width: fit-content;">1(a)</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-left: 20px;">1</div>

For Examiner's Use	1	(a)	(i)			For Examiner's Use
<div style="border: 1px solid black; padding: 2px; width: fit-content;">1(a)</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-left: 10px;">1</div>					[1marks] [1markah]	<div style="border: 1px solid black; padding: 2px; width: fit-content;">1(a)</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-left: 10px;">1</div>
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						<div style="border: 1px solid black; padding: 2px; width: fit-content;">1(a)</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-left: 10px;">1</div>