



**MODUL PINTAS**  
**TINGKATAN 5**  
**BIOLOGY**  
**Kertas 2**

**4551/2**

$2\frac{1}{2}$  jam

Dua jam tiga puluh minit

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**PERATURAN PEMARKAHAN**  
**BIOLOGY K2**  
**4551/2**

Peraturan Pemarkahan Biologi Kertas 2 Modul Pintas 2020

Question 1/ Soalan 1

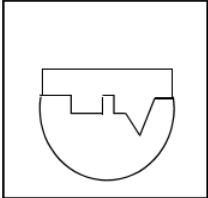
No.	Mark Scheme <i>Skema Markah</i>	Sub Mark	Total Mark
1(a)(i)	<p>Able to explain nervous coordination correctly. <i>Dapat menerangkan koordinasi dengan betul.</i></p> <p>Sample Answer: <i>Contohl jawapan:</i></p> <p>L : <u>Skeletal</u> muscle (tissue) <i>(Tisu) Otot rangka</i></p>	1	1
1(a)(ii)	<p>Able to explain the role of an organelle found in abundance in L correctly. <i>Dapat menerangkan peranan satu organel yang dijumpai dengan banyak dalam L dengan betul.</i></p> <p>Sample answers: <i>Contoh jawapan:</i></p> <p>P1: (More) Mitochondrion produces <b>more</b> energy <i>(Banyak) Mitokondria menghasilkan lebih banyak tenaga</i></p> <p>P2: (that is required) for contraction of L / skeletal muscle (tissue) <i>(yang diperlukan) untuk pengecutan L / (tisu) otot rangka</i></p> <p>P3: enables movement. <i>Membolehkan pergerakan</i></p>	1 1 1 P1+P2/P3	2
1(a)(iii)	<p>Able to explain how exercising change the rate of activity in tissue M correctly. <i>Dapat menerangkan bagaimana beriadah mengubah kadar aktiviti dalam tisu M dengan betul.</i></p> <p>Sample Answers: <i>Contoh Jawapan:</i></p> <p>P1: Exercising increases the rate of contraction of M / cardiac muscle (tissue) <i>Beriadah meningkatkan kadar pengecutan M / (tisu)otot kardiak</i></p> <p>P2: heartbeat rate increases <i>Kadar denyutan jantung meningkat</i></p> <p>P3: heart pumps oxygenated blood rapidly <i>jantung mengepam darah beroksigen dengan cepat</i></p> <p>P4: more oxygen transported to L / muscles / body cells <i>lebih banyak oksigen diangkut ke L / otot / sel-sel badan</i></p>	1 1 1 1	3

1(b)(i)	<p>Able to state one similarity and one difference between tissue M and tissue N correctly.  <i>Dapat menyatakan satu persamaan dan satu perbezaan antara tisu M dan tisu N dengan betul.</i></p> <p>Sample Answers:  <i>Contoh Jawapan:</i></p> <p>Similarity  <i>Persamaan</i></p> <p>P1: M and N / both are muscle tissues  <i>M dan N / kedua-duanya ialah tisu otot</i></p> <p>P2: M and N / both can contract (and relax)  <i>M dan N / kedua-duanya boleh mengecut (dan mengendur)</i></p> <p>P3: M and N / both enable movement  <i>M dan N / kedua-duanya boleh membolehkan pergerakan</i></p> <p>Difference:  <i>Perbezaan:</i></p> <p>D1: M is cardiac muscle (tissue), whereas N is smooth muscle (tissue)  <i>M ialah (tisu) otot kardiak, manakala N ialah (tisu) otot licin</i></p> <p>D2: M is found in the (wall of) heart, whereas N is found in the (wall of) vessels / tubes  <i>M didapati dalam (dinding) jantung, manakala N didapati dalam (dinding) salur darah / tiub</i></p> <p>D3: Contraction of M causes heartbeat, whereas contraction of N causes peristalsis.  <i>Pengecutan M menyebabkan denyutan jantung, manakala pengecutan N menyebabkan peristalsis</i></p> <p>D4: Rate of contraction of M can change / might be low or high, whereas the rate of contraction of N is slow.  <i>Kadar pengecutan M boleh berubah / boleh jadi rendah atau tinggi, manakala kadar pengecutan N adalah rendah.</i></p>	<p>1</p> <p>1</p> <p>1</p> <p>Any 1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>Any 1</p>	2
1(b)(ii)	<p>Able to explain how tissue N helps small intestine to carry out its function correctly.  <i>Dapat menerangkan bagaimana tisu N membantu usus kecil menjalankan fungsinya dengan betul.</i></p> <p>Sample Answers:  <i>Contoh Jawapan:</i></p> <p>P1: N / smooth muscle (tissue) contracts <u>and</u> relaxes  <i>N / (Tisu) Otot licin mengecut <u>dan</u> mengendur</i></p> <p>P2: causes peristalsis  <i>menyebabkan peristalsis</i></p>	<p>1</p> <p>1</p> <p>1</p>	

	<p>P3: more hydrolysis / digestion of food / example of food occurs <i>lebih banyak hidrolisis / pencernaan makanan / contoh makanan berlaku</i></p> <p>P4: More nutrients absorbed across the villi <i>lebih banyak nutrient diserap (melalui vilus)</i></p> <p>P5: undigested food will be forced / pushed to move into the large intestine / colon <i>Makanan yang tidak tercerna akan dipaksa / ditolak bergerak memasuki usus besar / kolon</i></p>	<p>1</p> <p>1</p> <p>Any 2</p>	<p>2</p>
1 (c)	<p>Able to explain how umbilical cord stem cells are suitable to be used in the production of different types of tissue correctly. <i>Dapat menerangkan bagaimana sel stem tali pusat sesuai untuk digunakan dalam penghasilan pelbagai jenis tisu dengan betul.</i></p> <p>Sample answers: <i>Contoh soalan:</i></p> <p>P1: Umbilical cord stem cells are able to carry out cell division / cell differentiation <i>Sel stem tali pusat dapat menjalankan pembahagian sel / pembezaan sel</i></p> <p>P2: to produce specialized tissues / example of tissue / P/Q/R <i>Untuk menghasilkan tisu yang khusus / contoh tisu / P/Q/R</i></p> <p>P3: that are genetically identical <i>Yang seiras secara genetik</i></p> <p>P4: (and) able to carry out specific function / example (dan) dapat menjalankan fungsi khusus / contoh</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>Any 2</p>	<p>2</p>
			12

Question 2/ Soalan 2

No.	Mark Scheme <i>Skema Markah</i>	Sub Mark	Total Mark												
2(a)(i)	<p>Able to state the type of protein and the level of protein structure of Protein J correctly. <i>Dapat menyatakan jenis protein dan aras struktur protein bagi Protein J dengan betul.</i></p> <p>Sample Answer: <i>Contoh jawapan:</i></p> <p>Type of Protein J: Polypeptide <i>Jenis Protein J: Polipeptida</i></p> <p>Level of structure of Protein J: Secondary protein structure <i>Aras struktur Protein J: Struktur protein sekunder</i></p>	1	1												
2(a)(ii)	<p>P1: Process X is hydrolysis <i>Proses X ialah hidrolisis</i></p> <p>P2: Protein J / polypeptide is broken down by / reacts with (4) water (molecule) <i>Protein J / polipeptida diuraikan oleh / bertindak balas dengan (4 molekul) air</i></p> <p>P3: Peptide bond is broken down <i>Ikatan peptida diputuskan</i></p> <p>P4: (4) dipeptide (molecules) produced <i>(4 molekul) dipeptida dihasilkan</i></p>	1  1  1  1  Any 2	2												
2(b)	<p>Able to explain the difference between Process X and Process Y correctly. <i>Dapat menerangkan perbezaan antara Proses X dan Proses Y dengan betul.</i></p> <p>Sample Answers: <i>Contoh Jawapan:</i></p> <table border="1" data-bbox="336 1675 1121 2018"> <thead> <tr> <th data-bbox="336 1675 416 1776"></th> <th data-bbox="416 1675 756 1776">Process X <i>Proses X</i></th> <th data-bbox="756 1675 1121 1776">Process Y <i>Proses Y</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="336 1776 416 1845">P1</td> <td data-bbox="416 1776 756 1845">Hydrolysis occurs <i>Hidrolisis berlaku</i></td> <td data-bbox="756 1776 1121 1845">Condensation occurs <i>Kondensasi berlaku</i></td> </tr> <tr> <td data-bbox="336 1845 416 1946">P2</td> <td data-bbox="416 1845 756 1946">Water is used / added <i>Air digunakan / ditambahkan</i></td> <td data-bbox="756 1845 1121 1946">Water is produced / released <i>Air dihasilkan / dibebaskan</i></td> </tr> <tr> <td data-bbox="336 1946 416 2018">P3</td> <td data-bbox="416 1946 756 2018">Polypeptide is broken down into dipeptides //</td> <td data-bbox="756 1946 1121 2018">A polipeptida is produced from dipeptides //</td> </tr> </tbody> </table>		Process X <i>Proses X</i>	Process Y <i>Proses Y</i>	P1	Hydrolysis occurs <i>Hidrolisis berlaku</i>	Condensation occurs <i>Kondensasi berlaku</i>	P2	Water is used / added <i>Air digunakan / ditambahkan</i>	Water is produced / released <i>Air dihasilkan / dibebaskan</i>	P3	Polypeptide is broken down into dipeptides //	A polipeptida is produced from dipeptides //	1  1  1	2
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	<p>Dipeptides is produced from a polypeptide <i>Polipeptida diuraikan kepada dipeptida // Dipeptida dihasilkan daripada polipeptida</i></p>	<p>Dipeptides combine to produce a polypeptide <i>Polipeptida dihasilkan daripada dipeptida // Dipeptida bergabung untuk membentuk polipeptida</i></p>	Any 2	
2(c)(i)	<p>Able to draw a diagram to complete Complex B, next, name molecules C and D correctly. <i>Dapat melukis rajah untuk melengkapkan Kompleks B, kemudian, menamakan molekul C dan D dengan betul.</i></p> <p>Sample Answer: <i>Contoh Jawapan:</i></p> <p>Complex B diagram <i>Rajah Kompleks B</i></p>  <p>C : galactose // glucose <i>galaktosa // glukosa</i>      +      D: glucose // galactose <i>glukosa // galaktosa</i></p>		1  1	2
2(c)(ii)	<p>Able to explain one way to overcome the problem of lactose intolerance in infant correctly. <i>Dapat menerangkan satu cara untuk mengatasi masalah intoleransi laktosa dalam bayi dengan betul.</i></p> <p>Sample Answers: <i>Contoh Jawapan:</i></p> <p>F1: Baby should consume / be given lactose free formula milk. <i>Bayi patut minum / diberikan susu formula tanpa laktosa.</i></p> <p>P1: (without lactose), there is no need for the small intestine / digestive system to hydrolyse lactose. <i>(Tanpa laktosa) tiada keperluan untuk usus kecil / sistem pencernaan menghidrolisis laktosa.</i></p> <p>F2: Baby should consume / be given soy base formula milk. <i>Bayi patut minum / diberikan susu formula berasaskan soya.</i></p> <p>P2: Soy milk does not contain lactose <i>Susu soya tidak mengandungi laktosa</i></p> <p>F3: Baby should not consume / not be given breast milk / dairy milk/ products <i>Bayi tidak patut minum / tidak diberikan susu ibu / susu / produk tenusu.</i></p> <p>P3: Breast milk/ dairy milk / products contain lactose. <i>Susu ibu/ susu / produk tenusu mengandungi laktosa.</i></p>		1  1  1  1  1  1  1	2
			F1/F2/F3 + any 1P	

2 (d)	<p>Able to explain the effect of not chewing food well with the health problems correctly.  <i>Dapat menerangkan kesan tidak mengunyah makanan dengan baik dengan masalah kesihatan dengan betul.</i></p> <p>Sample answers:  <i>Contoh jawapan:</i></p> <p>P1: Total surface area / TSA / TSA/V of (partially chewed) food is small.  <i>Jumlah luas permukaan / JLP / JLP/L makanan (separa kunyah) kecil</i></p> <p>P2: Less enzymatic reaction / hydrolysis / suitable example eg: less starch hydrolysed by amylase  <i>Kurang tindak balas enzim / hidrolisis / contoh sesuai cth: kurang kanji dicernakan oleh amilase</i></p> <p>P3: Indigestion occurs  <i>Ketidaccerna berlaku</i></p> <p>P4: Less digested food / nutrients absorbed / transported / assimilated (by body cells)  <i>Kurang makanan tercerna / nutrien diserap / diangkut / diasimilasikan (oleh sel-sel badan)</i></p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>Any 2</p>	<p>2</p>
			12

Question 3/ Soalan 3

No.	Mark Scheme <i>Skema Markah</i>	Sub Mark	Total Mark
3 (a)	<p>Able to name the respiratory organs for organism P and Q.  <i>Dapat menamakan organ respirasi bagi organisma P dan Q.</i></p> <p>Sample answers:  <i>Contoh jawapan:</i></p> <p>Organism P : lungs  <i>Organisma P: paru</i></p> <p>Organisms Q: Gills  <i>Organisma Q: Insang</i></p>	<p>1</p> <p>1</p>	<p>2</p>
(b)(i)	<p>Able to explain the importance of gaseous exchange in a human.  <i>Dapat menerangkan kepentingan pertukaran gas dalam manusia.</i></p> <p>Sample answers:  <i>Contoh jawapan:</i></p> <p>P1 : To supply oxygen for cellular respiration  <i>Untuk membekalkan oksigen bagi menjalani respirasi sel</i></p> <p>P2 : To eliminate waste products/carbon dioxide from the cells  <i>Untuk menyingkirkan hasil buangan/ karbon dioksida daripada sel</i></p>	<p>1</p> <p>1</p>	<p>2</p>

<p>(b)(ii)</p>	<p>Able to state one different between respiratory system of organisms P and Q.  <i>Dapat menyatakan satu perbezaan antara sistem respirasi organisma P dan Q.</i></p> <p>Sample answers:  <i>Contoh jawapan:</i></p> <table border="1" data-bbox="300 465 1137 1043"> <thead> <tr> <th></th> <th>Organism P <i>Organisma P</i></th> <th>Organisms Q <i>Organisma Q</i></th> </tr> </thead> <tbody> <tr> <td>P1</td> <td>Gaseous exchange occur at alveoli <i>Pertukaran gas berlaku di alveolus</i></td> <td>Gaseous exchange occur at lamellae <i>Pertukaran gas berlaku di lamella</i></td> </tr> <tr> <td>P2</td> <td>Lungs are protected by rib cage <i>Peparu dilindungi oleh sangkar rusuk</i></td> <td>Gills are protected by operculum <i>Insang dilindungi oleh operkulum</i></td> </tr> <tr> <td>P3</td> <td>Respiratory organ : lungs <i>Organ respirasi : peparu</i></td> <td>Organ : gills <i>Organ : insang</i></td> </tr> <tr> <td>P4</td> <td>Air enters the lung through nose/nostril <i>Udara memasuki peparu menerusi hidung/rongga hidung</i></td> <td>Air enter the opercular chamber through mouth <i>Udara memasuki ruang eperkulum menerusi mulut</i></td> </tr> </tbody> </table>		Organism P <i>Organisma P</i>	Organisms Q <i>Organisma Q</i>	P1	Gaseous exchange occur at alveoli <i>Pertukaran gas berlaku di alveolus</i>	Gaseous exchange occur at lamellae <i>Pertukaran gas berlaku di lamella</i>	P2	Lungs are protected by rib cage <i>Peparu dilindungi oleh sangkar rusuk</i>	Gills are protected by operculum <i>Insang dilindungi oleh operkulum</i>	P3	Respiratory organ : lungs <i>Organ respirasi : peparu</i>	Organ : gills <i>Organ : insang</i>	P4	Air enters the lung through nose/nostril <i>Udara memasuki peparu menerusi hidung/rongga hidung</i>	Air enter the opercular chamber through mouth <i>Udara memasuki ruang eperkulum menerusi mulut</i>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>Any 2</p>	<p>2</p>
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<p>(c)</p>	<p>Able to explain how malfunction diaphragm affects the breathing mechanism.  <i>Dapat menerangkan bagaimana kesan kepada mekanisma pernafasan jika diafragma tidak berfungsi.</i></p> <p>Sample answers:  <i>Contoh jawapan:</i></p> <p>P1 : Diaphragm cannot contract (and relax) to lower/flattens  <i>Diafragma tidak dapat mengecut ( dan mengendur) untuk menjadi lebih rendah/mendatar</i></p> <p>P2 : There is no change in the volume// air pressure in the thoracic cavity  <i>Tiada perubahan dalam isipadu// tekanan udara dalam rongga toraks</i></p> <p>P3: No gases exchange takes place  <i>Tiada pertukaran gas berlaku</i></p>	<p>1</p> <p>1</p> <p>1</p> <p>Any 2</p>	<p>2</p>															



(d)	<p>Able to explain the effects of smoking on his heartbeat rate and breathing rate.  <i>Dapat menerangkan kesan merokok terhadap kadar denyutan jantung dan kadar pernafasan.</i></p> <p>Sample answers:  <i>Contoh jawapan:</i></p> <p>F : Higher heartbeat rate and breathing rate  <i>Kadar denyutan jantung dan kadar pernafasan meningkat</i></p> <p>P1 : carbon monoxide (in blood) combine with haemoglobin  <i>Karbon monoksida (dalam darah) bergabung dengan hemoglobin</i></p> <p>P2 : cause him to breath faster / and deeper  <i>Menyebabkan pernafasan beliau meningkatkan / dan lebih dalam</i></p> <p>P3 : to obtain more oxygen  <i>Untuk mendapatkan lebih oksigen</i></p> <p>P4 : Nicotine in blood cause release of adrenaline  <i>Nikotin dalam darah menyebabkan adrenalin dirembeskan</i></p> <p>P5 : and make the heart pump faster  <i>dan menjadikan jantung mengepam lebih cepat</i></p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>Any 3</p>	<p>3</p>									
(e)	<p>Able to explain one different between all products of respiration by part P and Q  <i>Dapat menerangkan satu perbezaan antara semua hasil respirasi oleh bahagian P dan Q</i></p> <p>Sample answers:  <i>Contoh jawapan:</i></p> <table border="1" data-bbox="300 1272 1139 1682"> <thead> <tr> <th data-bbox="300 1272 539 1375">Aspects <i>Aspek - aspek</i></th> <th data-bbox="539 1272 826 1375">Part J <i>Bahagian J</i></th> <th data-bbox="826 1272 1139 1375">Part K <i>Bahagian K</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="300 1375 539 1547">All products of respiration <i>Semua hasil respirasi</i></td> <td data-bbox="539 1375 826 1547">energy/ ATP, carbon dioxide and water <i>tenaga/ ATP, karbon dioksida dan air</i></td> <td data-bbox="826 1375 1139 1547">energy/ATP, ethanol and carbon dioxide <i>tenagai/ ATP, etanol dan karbon dioksida</i></td> </tr> <tr> <td data-bbox="300 1547 539 1682">Explanation <i>Penerangan</i></td> <td colspan="2" data-bbox="539 1547 1139 1682">complete breakdown/oxidised of glucose// require oxygen (Part A), vice versa <i>penguraian lengkap/ pengoksidaan glukosa // memerlukan oksigen (Bahagian A), sebaliknya</i></td> </tr> </tbody> </table>	Aspects <i>Aspek - aspek</i>	Part J <i>Bahagian J</i>	Part K <i>Bahagian K</i>	All products of respiration <i>Semua hasil respirasi</i>	energy/ ATP, carbon dioxide and water <i>tenaga/ ATP, karbon dioksida dan air</i>	energy/ATP, ethanol and carbon dioxide <i>tenagai/ ATP, etanol dan karbon dioksida</i>	Explanation <i>Penerangan</i>	complete breakdown/oxidised of glucose// require oxygen (Part A), vice versa <i>penguraian lengkap/ pengoksidaan glukosa // memerlukan oksigen (Bahagian A), sebaliknya</i>		<p>1</p> <p>1</p>	<p>2</p>
Aspects <i>Aspek - aspek</i>	Part J <i>Bahagian J</i>	Part K <i>Bahagian K</i>										
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			12									

Question 4/ Soalan 4

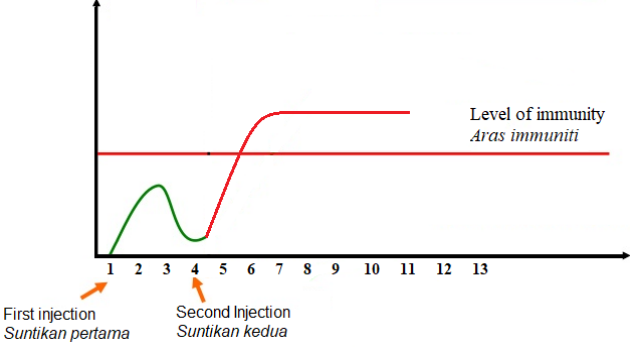
No.	Mark Scheme <i>Skema Markah</i>	Sub Mark	Total Mark
4(a)(i)	<p>Able to name the type of cell division and phase Q. <i>Dapat menamakan jenis pembahagian sel dan fasa Q</i></p> <p>Sample answer: <i>Contoh jawapan:</i></p> <p>Type of Cell division: Meiosis // Meiosis I <i>Jenis Pembahagian sel</i></p> <p>Phase Q: Prophase I <i>Fasa Q: Profasa I</i></p> <p><i>*reject prophase or prophase II</i></p>	<p>1</p> <p>1</p>	<p>2</p>
4(a)(ii)	<p>Able to draw the chromosomal behavior of phase R in Diagram 4.1. <i>Dapat melukis perlakuan kromosom fasa R dalam rajah 4.1</i></p> <p>Sample answer: <i>Contoh jawapan:</i></p> <div data-bbox="587 974 906 1176" style="text-align: center;"> </div> <p>- correct homologous chromosomes arrangement <i>- susunan kromosom homolog yang betul</i></p> <p>- one correct label <i>- satu label yang betul</i></p>	<p>1</p> <p>1</p>	<p>2</p>
4(b)(i)	<p>Able to explain the effects to the chromosomal behavior during phase S. <i>Dapat menerangkan kesan kepada perlakuan kromosom semasa fasa S</i></p> <p>Sample Answers: <i>Contoh Jawapan:</i></p> <p>P1: less spindle fibre is formed/ Spindle fibre is failed to form <i>kurang gentian gelendung terhasil/ Gentian gelendung</i></p> <p>P2: The <u>homologous chromosomes</u> are not pulled (evenly to the opposite poles)/The <u>homologous chromosomes</u> are failed to separate (to the opposite poles) <i>Kromosom homolog tidak tertarik (dengan sekata ke kutub bertentangan/ Kromosom homolog gagal berpisah (ke kutub bertentangan)</i></p>	<p>1</p> <p>1</p>	<p>2</p>

	<p>P3: producing gamete/daughter cells with extra/less/one/two/three chromosomes <i>menghasilkan gamet/sel anak yang mempunyai lebih/kurang/ satu/ dua/ tiga kromosom</i></p>	1	
		Any 2	
4(b)(ii)	<p>Able to explain how Puan Sri daughter gets Down Syndrome. <i>Dapat menerangkan bagaimana anak Puan Sri mendapat Sindrom Down.</i></p> <p>Sample Answers: <i>Contoh Jawapan:</i></p> <p>P1: Gamete with 24 chromosomes fused with gamete with 23 chromosomes. <i>Gamet dengan 24 kromosom bergabung dengan gamet yang mempunyai 23 kromosom.</i></p> <p>P2: fertilization occur <i>persenyawaan berlaku</i></p> <p>P3: the daughter has 47 chromosomes <i>anak perempuan mempunyai 47 kromosom</i></p> <p>P4: extra one chromosome in 21<sup>st</sup> chromosome/ three chromosome at 21<sup>st</sup>/ trisomy 21 <i>satu kromosom berlebihan pada kromosom ke 21/ tiga kromosom pada kromosom ke 21/ trisomy 21</i></p>	1 1 1 1	3
		Any 3	
4(c)	<p>Able to predict and explain the shape of the watermelon offspring. <i>Dapat meramal dan menerangkan bentuk tembikai yang baharu</i></p> <p>Sample Answers: <i>Contoh Jawapan:</i></p> <p>F1: Round shape. <i>bentuk bulat.</i></p> <p>P2: Heart shaped watermelon cannot be inherited <i>Tembikai berbentuk hati tidak dapat diwarisi</i></p> <p>P3: The shape of the parent is not genetically modified. <i>Bentuk asal induk tidak diubahsuai secara genetik.</i></p> <p>P4: The farmer use a plastic mould to form a heart shaped watermelon. <i>Petani menggunakan acuan plastik untuk menghasilkan tembikai berbentuk hati.</i></p> <p>Or <i>Atau</i></p> <p>F1: heart shape. <i>bentuk hati.</i></p> <p>P2: When the watermelon is still young/small, the shape is round. <i>Ketika tembikai masih kecil, bentuknya ialah bulat.</i></p>	1 1 1 1	3
		Any 3	

	<p>P3: Shakir use a plastic mould to form a heart shaped watermelon.  <i>Shakir menggunakan acuan plastik untuk menghasilkan tembikai berbentuk hati.</i></p> <p><i>*reject if only F</i></p>	1	
			12

Question 5/ Soalan 5

No.	Mark Scheme <i>Skema Markah</i>	Sub Mark	Total Mark
5(a)(i)	<p>Able to identify P and Q.  <i>Dapat mengenalpasti P dan Q.</i></p> <p>Sample Answer:  <i>Sampel jawapan:</i></p> <p>P: Active immunity.  <i>Keimunan aktif.</i></p> <p>Q: Passive immunity.  <i>Keimunan pasif.</i></p>	1    1	2
5(a)(ii)	<p>Able to give reason for answer in a(i).  <i>Dapat memberikan sebab bagi jawapan di (a)(i).</i></p> <p>Sample answers:  <i>Contoh jawapan:</i></p> <p>P1: Active immunity is acquired when body makes its own antibodies in response to stimulation by an antigen  <i>Keimunan aktif diperolehi apabila badan menghasilkan sendiri antibodi sebagai tindakbalas rangsangan kehadiran antigen.</i></p> <p>P2: Passive immunity is acquired when body received antibody from an outside source.  <i>Keimunan pasif pula diperolehi apabila badan menerima antibodi dari sumber luar.</i></p>	1    1	2

<p>5(b)</p>	<p>Able to complete Figure 5.2 to show the concentration of antibodies after the second injection was obtained by the individual.</p> <p><i>Dapat melengkapkan rajah 5.2 bagi menunjukkan kepekatan antibodi selepas suntikan kedua diperolehi oleh individu tersebut.</i></p> <p>Sample Answers:  <i>Contoh Jawapan:</i></p> 	<p>1</p>	<p>1</p>
<p>5(c)(i)</p>	<p>Able to explain why a second vaccination is required.</p> <p><i>Dapat menerangkan mengapa suntikan kedua diperlukan.</i></p> <p>Sample Answer:  <i>Contoh Jawapan:</i></p> <p>P1: The first injection does not stimulate sufficient production of antibodies.  <i>Suntikan pertama tidak meransang penghasilan antibodi yang mencukupi.</i></p> <p>P2: The second injection will stimulate a quicker production of antibodies /higher concentration of antibodies  <i>Suntikan kedua akan merangsang penghasilan antibodi yang pantas / kepekatan antibodi yang lebih tinggi</i></p> <p>P3: to reach/exceed the level of immunity  <i>untuk mencapai / melebihi tahap imuniti</i></p>	<p>1</p> <p>1</p> <p>1 Any 2</p>	<p>2</p>
<p>5(c)(ii)</p>	<p>Able to explain why virus has to be made harmless before use.</p> <p><i>Dapat menerangkan mengapa virus perlu dilemahkan sebelum digunakan.</i></p> <p>Sample Answers:  <i>Contoh Jawapan:</i></p> <p>So they don't cause the disease  <i>Supaya virus itu tidak menyebabkan penyakit kepada penerima suntikan vaksin</i></p>	<p>1</p>	<p>1</p>

5(d)	<p>Able to discuss why Mrs X has immunity to the diseases in the future. <i>Dapat membincangkan mengapa Puan X mempunyai keimunan terhadap penyakit tersebut pada masa hadapan.</i></p> <p>Sample answers: <i>Sampel soalan:</i></p> <p>P1: after the infection, B-lymphocytes remain in the body as memory cells. <i>Selepas jangkitan, Limfosit-B akan kekal di dalam badan individu.</i></p> <p>P2: B-lymphocytes will store information of the pathogens.(measles virus). <i>Limfosit –B akan menyimpan maklumat tentang patogen.(virus campak).</i></p> <p>P3: the B-lymphocytes help to defend the body against further infection by the same antigen <i>Sel memori –B akan mempertahankan tubuh terhadap jangkitan yang sama.</i></p> <p>P4: The body is then said to be immune against the disease. <i>Badan individu telah mencapai keimunan terhadap penyakit ini.</i></p> <p>P5: This is known as natural acquired active immunity. <i>Ini dikenali sebagai keimunan aktif semulajadi.</i></p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>Any 4</p>	<p>4</p>
			12

Question 6/ Soalan 6

No.	Mark Scheme <i>Skema Markah</i>	Sub Mark	Total Mark
6(a)(i)	<p>Able to explain nervous coordination correctly. <i>Dapat menerangkan koordinasi dengan betul.</i></p> <p>Sample answer: <i>Sampel jawapan:</i></p> <p>P1: involves (specific) receptor that (detects and) convert stimulus into impulse <i>Melibatkan reseptor (spesifik) yang (mengesan dan) menukarkan rangsangan kepada impuls</i></p> <p>P2: (impulse is) transmitted via sensory / afferent neurone <i>(impuls) dihantar melalui saraf deria / aferen</i></p> <p>P3: to the central nervous system / brain / spinal cord <i>ke sistem saraf pusat / otak / saraf tunjang</i></p> <p>P4: that interpretes / processes impulse <i>yang mentafsir / memproses impuls</i></p> <p>P5: (next, impulse is) transmitted via motor / efferent neurone <i>(kemudian, impuls) dihantar melalui saraf motor / eferen</i></p> <p>P6: to the effector / muscles / glands / examples <i>ke efektor / otot / kelenjar / contoh</i></p> <p>P7: response carried out towards stimulus <i>gerak balas dijalankan terhadap rangsangan</i></p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>Any 4</p>	<p>4</p>

6(a)(ii)	<p>Able to explain how thermoreceptor, structures I, II and III help in regulating body temperature during a hot day correctly.  <i>Dapat menerangkan bagaimana termoreseptor, struktur I, II dan III membantu dalam mengawal atur suhu badan semasa hari panas dengan betul.</i></p> <p>Sample answer:  <i>Contoh jawapan:</i></p>		
	<p>P1: Thermoreceptor (detects and) converts stimulus / the increase in (body) temperature into impulse.  <i>Termoreseptor (mengesan dan) menukarkan rangsangan / kenaikan suhu(badan) kepada impuls</i></p>	1	
	<p>P2: Impulse is transmitted to the medulla oblongata / brain to be interpreted /processed  <i>Impuls dihantar ke medula oblongata / otak untuk ditafsir / diproses</i></p>	1	
	<p>P3: Structure I is erector muscle  <i>Struktur I ialah otot regang</i></p>	1	
	<p>P4: (Erector muscle / I) relaxes causes the skin hair to lie / lay down  <i>(Otot regang / I) mengendur menyebabkan bulu roma mendatar / rebah</i></p>	1	
	<p>P5: Trapped air / insulating layer in thin  <i>Lapisan udara terperangkap / penebat menjadi nipis</i></p>	1	
	<p>P6: <u>More</u> heat released to the surrounding  <i><u>Lebih banyak</u> haba dibebaskan ke persekitaran</i></p>	1	
	<p>P7: Structure II is blood capillary / arteriole / vessel  <i>Struktur II ialah kapilari / salur darah / arteriol</i></p>	1	
	<p>P8: (blood capillary / vessel / arteriole / II) undergoes vasodilation / dilates / becomes bigger  <i>(kapilari / salur darah / arteriol / II) menjalani vasodilasi / mengembang / menjadi lebih besar</i></p>	1	
	<p>P9: <u>More</u> blood flows with (more) heat content  <i><u>Lebih banyak</u> darah mengalir dengan kandungan haba (yang lebih banyak)</i></p>	1	
	<p>P10: blood capillary / vessel / arteriole / II is nearer to the skin surface  <i>kapilari / salur darah / arteriol / II lebih hampir dengan permukaan kulit</i></p>	1	
	<p>P11: <u>More</u> heat released to the surrounding  <i><u>Lebih banyak</u> haba dibebaskan ke persekitaran</i></p>	1	
	<p>P12: Structure III is sweat gland  <i>Struktur III ialah kelenjar peluh</i></p>	1	
	<p>P13: (Sweat gland / III) is activated / stimulated to produce / secrete <u>more</u> sweat  <i>(Kelenjar peluh / III) diaktifkan / dirangsang untuk menghasilkan / merembeskan <u>lebih banyak</u> peluh</i></p>	1	
	<p>P14: (more) sweat absorbed excess heat in the body  <i>(lebih banyak) peluh menyerap haba berlebihan dalam badan</i></p>	1	
	<p>P15: (next,) evaporate to (more) water vapour  <i>(kemudian,) menyejat kepada (lebih banyak) wap air</i></p>	1	10









7(b)	<p>Able to explain how the change in light intensity and the environmental temperature can affect the productivity of crops in agriculture.  <i>Dapat menerangkan bagaimana perubahan pada keamatan cahaya dan suhu persekitaran dapat mempengaruhi pengeluaran hasil tanaman dalam pertanian</i></p> <p>Sample Answers:  <i>Contoh Jawapan:</i></p> <p>F1: Light intensity and the environmental temperature  <i>keamatan cahaya dan suhu persekitaran</i></p> <p>P1: Temperature / light intensity at tropical countries are at their maximum at noon time / very low at night / early morning  <i>suhu/ keamatan cahaya di negara tropika adalah pada nilai maksimum pada waktu tengahari / sangat rendah pada malam / awal pagi</i></p> <p>P2: A large increase in light intensity (from the sun) results in a large increase in (environmental) temperature  <i>peningkatan besar dalam keamatan cahaya (dari matahari) menyebabkan peningkatan besar dalam suhu (persekitaran)</i></p> <p>F2: light intensity  <i>Keamatan cahaya</i></p> <p>P3: The amount of light received by plant determine the amount of food / glucose / organic substance synthesised / made by plants  <i>Jumlah cahaya yang diterima oleh pokok menentukan jumlah makanan / glukosa / bahan organik disintesis / dibuat oleh pokok</i></p> <p>P4: the rate of photosynthesis increases with the light intensity // The higher the light intensity the higher the rate of photosynthesis  <i>kadar fotosintesis meningkat dengan peningkatan keamatan cahaya // semakin tinggi keamatan cahaya semakin tinggi kadar fotosintesis</i></p> <p>P5: when light intensity is too high, the rate of photosynthesis is constant / saturation point  <i>apabila keamatan cahaya terlalu tinggi, kadar fotosintesis menjadi malar/ titik tepu</i></p> <p>P6: due to limiting factor such as carbon dioxide concentration / amount of water / number of stomata / surface area of leaves  <i>disebabkan oleh kepekatan karbon dioksida / jumlah air/ bilangan stoma / luas permukaan daun menjadi faktor penghad</i></p> <p>P7: light energy is needed in the photosynthesis // break down of water (molecules) / light reaction in photosynthesis  <i>Tenaga cahaya diperlukan bagi menjalani fotosintesis // memecahkan (molekul) air / tindakbalas cahaya dalam fotosintesis</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>10</p>
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P8:	in a greenhouse the light intensity is controlled at the optimum rate <i>dalam rumah hijau keamatan cahaya dikawal pada kadar optimum</i>	1	
F3:	environmental temperature <i>suhu persekitaran</i>	1	
P9:	high temperature increase the enzymatic activity <i>suhu yang tinggi akan meningkatkan aktiviti enzim</i>	1	
P10:	the higher the enzymatic activity make the plant more reproductive / higher rate of photosynthesis <i>semakin tinggi aktiviti enzim menyebabkan pokok lebih produktif / meningkatkan kadar fotosintesis</i>	1	
P11:	a greenhouse is designed to trap solar energy in order to maintain the temperature (at range of 25 °C - 30°C ) / controlled at optimum level <i>rumah hijau direka bentuk untuk memerangkap tenaga solar bagi mengekalkan suhu (pada julat 25° C – 30 °C) / dikawal pada aras optimum</i>	1	
		Max 10	
			20

Question 8/ Soalan 8

No.	Mark Scheme <i>Skema Markah</i>	Sub Mark	Total Mark
8(a)(i)	Able to define Mendel Second Law <i>Dapat mendefinisikan Hukum Mendel Kedua</i>  Sample answer: <i>Sampel jawapan:</i>  F1: Each pair of alleles control the trait of organism <i>Setiap pasang alel mengawal trait sesuatu organisma</i> P2: alleles TT/Tt/tt control trait tall or dwarf // alleles RR/Rr/rr control trait round or wrinkled seed <i>alel TT/Tt/tt mengawal trait tinggi atau kerdil // alel RR/Rr/rr mengawal trait biji benih bulat atau berkedut</i>  P3: During gamete formation, each member of allele TT/Tt/tt may combine randomly with either member of pair of allele RR/Rr/rr <i>Semasa pembentukan gamet, setiap ahli daripada alel TT/Tt/tt boleh bergabung secara rawak dengan mana-mana pasangan alel RR/Rr/rr</i>	1  1  1  Max 2	2

<p>8(a)(ii)</p>	<p>Able to write down the genotypes of the parents of each cross and illustrate the inheritance of cross I using schematic diagram.  <i>Dapat menulis genotip induk bagi setiap kacukan dan melukis rajah perwarisan bagi kacukan I</i></p> <p>Sample Answers:  <i>Sampel jawapan:</i></p> <table border="1" data-bbox="453 481 1061 707"> <thead> <tr> <th>Cross <i>Kacukan</i></th> <th>Parent genotype <i>Genotip Induk</i></th> </tr> </thead> <tbody> <tr> <td>I</td> <td>TtRr x ttrr</td> </tr> <tr> <td>II</td> <td>TtRR x TtRR</td> </tr> <tr> <td>III</td> <td>TtRr x Ttrr</td> </tr> <tr> <td>IV</td> <td>ttRR x TTrr</td> </tr> </tbody> </table> <table data-bbox="331 824 1157 1400"> <tr> <td></td> <td>Parent's genotype <i>Genotip induk</i></td> <td>TtRr</td> <td>X</td> <td>ttrr</td> <td></td> </tr> <tr> <td>P1</td> <td>Meiosis</td> <td>↓</td> <td></td> <td>↓</td> <td></td> </tr> <tr> <td>P2</td> <td>Gamete <i>Gamet</i></td> <td>TR Tr tR tr</td> <td></td> <td>tr</td> <td></td> </tr> <tr> <td>P3</td> <td>Fertilisation <i>Persenyawaan</i></td> <td>↓</td> <td></td> <td>↓</td> <td></td> </tr> <tr> <td>P4</td> <td>F1 generation genotype <i>Genotip generasi F1</i></td> <td>TtRr</td> <td>Ttrr</td> <td>ttRr</td> <td>ttrr</td> </tr> <tr> <td></td> <td>F1 generation phenotype <i>Fenotip generasi F1</i></td> <td>Tall, Round</td> <td>Tall, wrinkled</td> <td>Short, Round</td> <td>Short, wrinkled</td> </tr> <tr> <td>P5</td> <td>F1 Phenotype Ratio</td> <td>1</td> <td>: 1</td> <td>: 1</td> <td>: 1</td> </tr> </table> <p>* <i>Gamete must all correct</i></p>	Cross <i>Kacukan</i>	Parent genotype <i>Genotip Induk</i>	I	TtRr x ttrr	II	TtRR x TtRR	III	TtRr x Ttrr	IV	ttRR x TTrr		Parent's genotype <i>Genotip induk</i>	TtRr	X	ttrr		P1	Meiosis	↓		↓		P2	Gamete <i>Gamet</i>	TR Tr tR tr		tr		P3	Fertilisation <i>Persenyawaan</i>	↓		↓		P4	F1 generation genotype <i>Genotip generasi F1</i>	TtRr	Ttrr	ttRr	ttrr		F1 generation phenotype <i>Fenotip generasi F1</i>	Tall, Round	Tall, wrinkled	Short, Round	Short, wrinkled	P5	F1 Phenotype Ratio	1	: 1	: 1	: 1	<p>1 1 1 1</p> <p>1</p> <p>1</p> <p>8</p> <p>1</p> <p>1</p> <p>Max 8</p>	
Cross <i>Kacukan</i>	Parent genotype <i>Genotip Induk</i>																																																						
I	TtRr x ttrr																																																						
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IV	ttRR x TTrr																																																						
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P1	Meiosis	↓		↓																																																			
P2	Gamete <i>Gamet</i>	TR Tr tR tr		tr																																																			
P3	Fertilisation <i>Persenyawaan</i>	↓		↓																																																			
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P5	F1 Phenotype Ratio	1	: 1	: 1	: 1																																																		
<p>8(b)</p>	<p>Able to describe why the married couple do not have a child with blood group O.  <i>Dapat menerangkan mengapa pasangan suami isteri itu tidak mempunyai anak yang mempunyai kumpulan darah O.</i></p> <p>Sample Answers:  <i>Contoh Jawapan:</i></p>																																																						

S1:	The human ABO blood group is determined by three alleles, $I^A$ , $I^B$ and $I^O$ <i>Kumpulan darah manusia ABO ditentukan oleh tiga alel, <math>I^A</math>, <math>I^B</math> dan <math>I^O</math></i>	1	10
S2:	Alleles $I^A$ and $I^B$ are codominant to each other <i>Alel <math>I^A</math> and <math>I^B</math> adalah kodominan bagi satu sama lain</i>	1	
S3:	and can be expressed equally in the phenotype of the heterozygous individuals. <i>dan boleh menonjolkan diri dalam fenotip individu yang heterozigot.</i>	1	
S4:	Allele $I^O$ is recessive <i>Alel <math>I^O</math> adalah resesif</i>	1	
S5:	The genotype for the mother is $I^O I^O$ <i>Genotip ibu ialah <math>I^O I^O</math></i>	1	
S6:	The genotype for the father is $I^A I^B$ <i>Genotip bagi bapa ialah <math>I^A I^B</math></i>	1	
S7:	The mother will produce one type of gametes, $I^O$ <u>during meiosis</u> <i>Ibu akan menghasilkan satu jenis gamet, <math>I^O</math> <u>semasa meiosis</u></i>	1	
S8:	The father will produce two types of gametes, $I^A$ and $I^B$ during meiosis <i>Bapa akan menghasilkan dua jenis gamet, <math>I^A</math> and <math>I^B</math> semasa meiosis</i>	1	
S9:	Random fertilisation / fusion of gametes <i>Persenyawaan secara rawak / gabungan gamet</i>	1	
S10:	Produce children's genotype $I^A I^O$ and $I^B I^O$ <i>Menghasilkan genotip anak <math>I^A I^O</math> dan <math>I^B I^O</math></i>	1	
S11:	Phenotype ratio of children type of blood group A to B is 1:1// 50% probability of the children is blood group A while 50% probability of the children is blood group B <i>Nisbah fenotip bagi kumpulan darah A kepada B bagi anak ialah 1:1// 50% kemungkinan anak mempunyai kumpulan darah A dan 50% kemungkinan anak mempunyai kumpulan darah B</i>	1	
*Accept schematic diagram for S5,S6,S7,S8,S9,S10,S11 if students write a <u>complete schematic diagram</u>		Max 10	
			20

Question 9/ Soalan 9

No.	Mark Scheme <i>Skema Markah</i>	Sub Mark	Total Mark
9(a)	<p>Able to discuss why tropical rainforest is considered by ecologists around the world as a very valuable area and it needs to be maintained. <i>Dapat membincangkan mengapa Hutan Hujan Tropika dianggap oleh ahli-ahli ekologi seluruh dunia sebagai satu kawasan yang sangat berharga dan perlu dikekalkan.</i></p> <p>Sample answer: <i>Sampel jawapan:</i></p> <p>P1: Rainforests as carbon sinks. <i>Hutan hujan tropika bertindak sebagai kawasan tadahan karbon.</i></p> <p>P2: Because they absorb vast amount of carbon dioxide during photosynthesis <i>Kerana menyerap sejumlah besar karbon dioksida semasa fotosintesis.</i></p> <p>P3: Deforestation / removal of a forest from land// slash and burn method <i>Penyahhutananan /penebangan hutan berleluasa//kaedah tebang dan bakar</i></p> <p>P4: With less trees, less carbon dioxide is used in photosynthesis <i>Apabila pokok berkurangan, kurang karbon dioksida digunakan untuk fotosintesis.</i></p> <p>P5: Less photosynthesis also means less oxygen production. <i>Fotosintesis berkurangan menyebabkan penghasilan gas oksigen turut berkurang.</i></p> <p>P6: More carbon dioxide is released (as a result of the burning of trees). <i>Lebih banyak karbon dioksida bebaskan( akibat pembakaran pokok).</i></p> <p>P7: This will lead to global warming. <i>Ini akan menyebabkan pemanasan global berlaku.</i></p> <p>P8: Deforestation disrupt normal weather pattern/climate change globally . <i>Penyahhutananan juga mengubah iklim dunia// menjadikan sesetengah tempat panas dan kering.</i></p> <p>P9: Rainforest is also serve as water catchment area. <i>Hutan hujan tropika juga merupakan kawasan tadahan air.</i></p> <p>P10: Cover crops , fallen leaves, and tree branches act as sponges that absorb most of the rainwater. <i>Tanaman tutup bumi, daun yang gugur, dan ranting kayu</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>10</p>

	<i>bertindak sebagai span yang menyerap sebahagian besar air hujan.</i>		
P11:	Trees that live along the hillside stabilize the soil// the roots of the tree tie the soil together.  <i>Pokok-pokok yang hidup di sepanjang lereng bukit menstabilkan keadaan tanah/akar pokok mengikat butir-butir tanah bersama.</i>	1	
P12:	The absence of plant root systems makes the soil structure unstable.  <i>Tanpa sistem akar yang dapat mencengkam tanah, struktur tanah menjadi tidak stabil.</i>	1	
P13:	This leads to landslides.  <i>Ini menyebabkan tanah runtuh.</i>	1	
P14:	Heavy rainfall for a long period of time causes eroded land to be carried by rainwater and deposited at the base of the river.  <i>Hujan lebat untuk suatu jangka masa yang panjang menyebabkan tanah yang terhakis dibawa oleh aliran air hujan dan termendap di dasar sungai.</i>	1	
P15:	Rainforests is rich in biodiversity.  <i>Hutan hujan kaya dengan kepelbagaian biodiversiti .</i>	1	
P16:	<i>Rain forests can supply sustainable crops such as nuts, rubber, fruits and plant oils.</i>  <i>Hutan hujan tropika boleh membekalkan tanaman mampan seperti kacang, getah, buah-buahan dan minyak tumbuhan.</i>	1	
P17:	Destruction of rain forests will decrease the rate of transpiration// reduction in rainfall// subsequently disruption of the water cycle.  <i>Pemusnahan hutan hujan akan mengakibatkan kadar transpirasi berkurangan// pengurangan hujan // gangguan kitaran air.</i>	1	
P18:	Animals lost their habitat.  <i>Haiwan kehilangan habitat.</i>	1	
P19:	Flora and fauna become extinct.  <i>Kepupusan flora dan fauna berlaku.</i>	1	
		Max	
		10	





9(b)(ii)	<p>Able to suggest steps that can be taken to overcome problem.  <i>Dapat mencadangkan cara yang boleh diambil untuk mengatasi masalah kematian penyu.</i></p> <p>Sample Answers:  <i>Contoh Jawapan:</i></p> <p>P1: Educate the public on the importance of keeping the environment clean  <i>Mendidik orang awam tentang kepentingan memastikan kebersihan persekitaran.</i></p> <p>P2 Enforce law against any individual that practices improper waste disposal at sea./ take action against individual that practices improper waste disposal at sea.  <i>Menggubal undang-undang ke atas sebarang individu dan pihak yang mengamalkan pelupusan sampah yang tidak teratur di kawasan laut dan pantai/ mengambil tindakan pada mereka yang melanggar peraturan yang di tetapkan oleh pihak berkuasa dengan berat.</i></p> <p>P3: New technology can be use to clean the polluted environment such as oil spill./ use bacteria to clean oil spill.  <i>Teknologi baharu boleh digunakan untuk membersihkan persekitaran yang tercemar seperti tumpahan minyak./ penggunaan bakteria bagi membersihkan tumpahan minyak.</i></p> <p>P4: Exhibit 4R campaigns reduce (kurangkan), reuse (guna semula), recycle (kitar semula) dan refuse (tolak)  <i>Melancarkan kempen 4R - reduce (kurangkan), reuse (guna semula), recycle (kitar semula) dan refuse (tolak)</i></p> <p>P5: installing garbage traps in the river to prevent them from flowing into the sea.  <i>Memasang perangkap sampah di sungai bagi mengelakkan sampah tersebut mengalir masuk ke dalam laut.</i></p> <p>P6: Prohibition of use of plastic bags/ Straw .  <i>Larangan penggunaan beg plastik/ penyedut minuman plastik.</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>Any 4</p>	<p>4</p>
			20

**END OF MARK SCHEME**  
**SKEMA MARKAH TAMAT**