

Jawab **semua** soalan.

- 1 Diagram 1 shows an animal cell.
Rajah 1 menunjukkan satu sel haiwan.

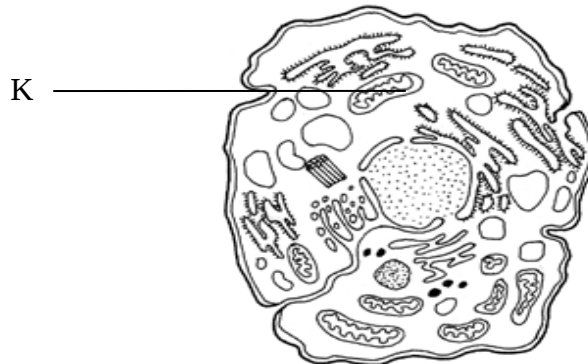


Diagram 1 / *Rajah 1*

What is organelle K?
Apakah organel K?

- | | |
|------------------------------|---|
| A Nucleus
<i>Nukleus</i> | C Mitochondrion
<i>Mitokondria</i> |
| B Ribosome
<i>Ribosom</i> | D Smooth endoplasmic reticulum
<i>Jalinan endoplasma licin</i> |
- 2 Diagram 2 shows the cell organisation in a multicellular organism.
Rajah 2 menunjukkan organisasi sel dalam organisma multisel.

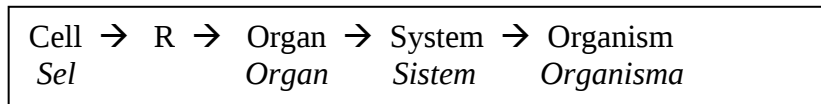


Diagram 2 / *Rajah 2*

Which part of the plant is represented by R?
Apakah bahagian tumbuhan yang diwakili oleh R?

- | | |
|-------------------------|--|
| A Xylem
<i>Xilem</i> | C Skin
<i>Kulit</i> |
| B Muscle
<i>Otot</i> | D Digestive system
<i>Sistem Pencernaan</i> |

- 3 Diagram 3 shows an animal cell as observed under an electron microscope.
Rajah 3 menunjukkan sel haiwan yang kelihatan melalui mikroskop elektron.

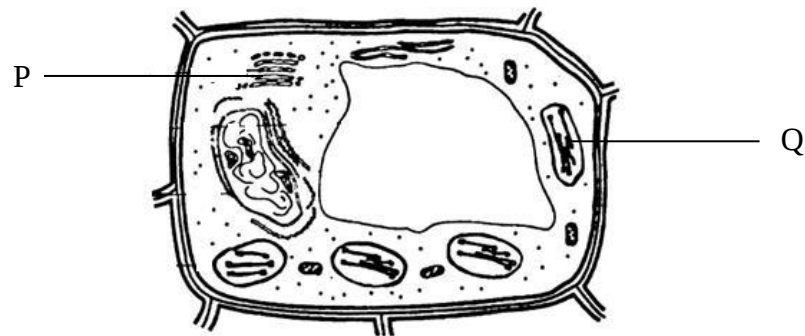


Diagram 3 / Rajah 3

	Organelle P <i>Organel P</i>	Organelle Q <i>Organel Q</i>
A	Site of lipid synthesis <i>Tapak sintesis lipid</i>	Site of protein packaging <i>Tapak pembungkusan protein</i>
B	Site of protein modification <i>Tapak pengubahsuaian protein</i>	Site of photosynthesis <i>Tapak sintesis fotosintesis</i>
C	Site of protein synthesis <i>Tapak sintesis protein</i>	Site of lipid synthesis <i>Tapak sintesis lipid</i>
D	Site of protein packaging <i>Tapak pembungkusan protein</i>	Site of protein modification <i>Tapak pengubahsuaian protein</i>

- 4 Diagram 4 shows the structure of the plasma membrane.
Rajah menunjukkan struktur membran plasma.

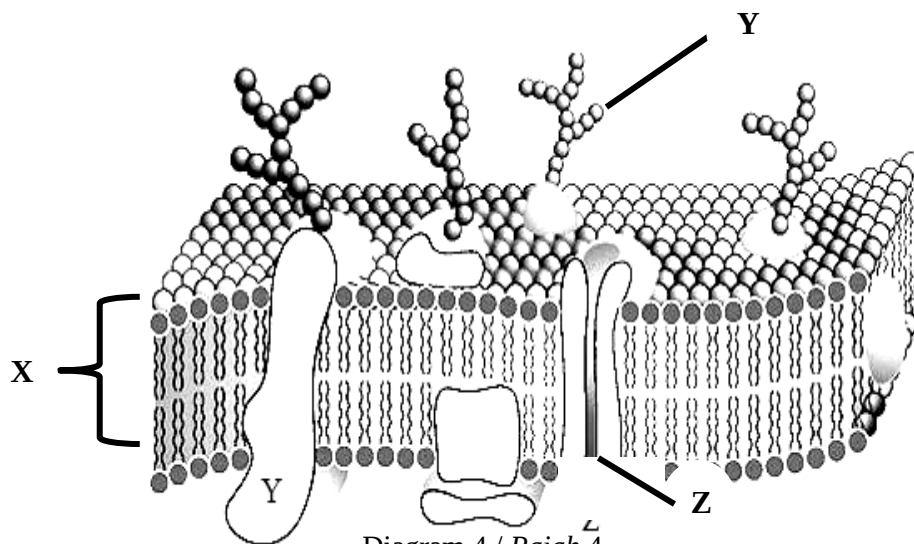


Diagram 4 / Rajah 4

What are the parts that labelled X, Y and Z?

Apakah bahagian yang berlabel X, Y dan Z?

	X	Y	Z
A	Phospholipid bilayer <i>Dwilapisan fosfolipid</i>	Glycoprotein <i>Glikoprotein</i>	Pore protein <i>Protein liang</i>
B	Glycoprotein <i>Glikoprotein</i>	Pore protein <i>Protein liang</i>	Phospholipid bilayer <i>Dwilapisan fosfolipid</i>
C	Pore protein <i>Protein liang</i>	Glycoprotein <i>Glikoprotein</i>	Phospholipid bilayer <i>Dwilapisan fosfolipid</i>
D	Glycoprotein <i>Glikoprotein</i>	Phospholipid bilayer <i>Dwilapisan fosfolipid</i>	Pore protein <i>Protein liang</i>

- 5 A red blood cell is placed in distilled water.

Which of the following statements is true about the movement of water molecules in early stage?

Satu sel darah merah diletakkan di dalam air suling.

Antara yang berikut, yang manakah betul mengenai pergerakan molekul-molekul air di peringkat awal?

- A The rate of water molecules entering the cell is lower than exiting the cell
Kadar molekul air masuk ke dalam sel adalah lebih rendah daripada keluar dari sel
- B The rate of water molecules entering the cell is higher than exiting the cell
Kadar molekul air masuk ke dalam sel adalah lebih tinggi daripada keluar dari sel
- C No water molecules entering or exiting the cell
Tiada molekul air masuk ke dalam sel atau keluar dari sel
- D The rate of water molecules entering and exiting the cell is the same
Kadar molekul air masuk ke dalam sel dan keluar dari sel adalah sama
- 6 Diagram 5 shows a Venn Diagram about the process of diffusion and osmosis.
Rajah 5 menunjukkan Gambarajah Venn tentang proses resapan dan osmosis.

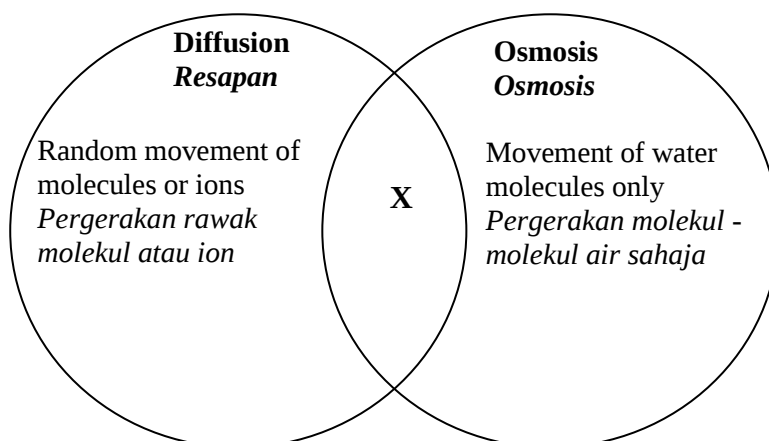


Diagram 5 / Rajah 5

What is the suitable statement for X?

Apakah pernyataan yang sesuai untuk X?

- A Down the concentration gradient
Mengikut kecerunan kepekatan
- B Require energy
Memerlukan tenaga
- C Against the concentration gradient
Menentang kecerunan kepekatan
- D Require carrier protein and pore protein
Memerlukan protein pembawa dan protein liang

- 7 Diagram 6 shows the basic DNA structure.
Rajah 6 menunjukkan struktur asas DNA.

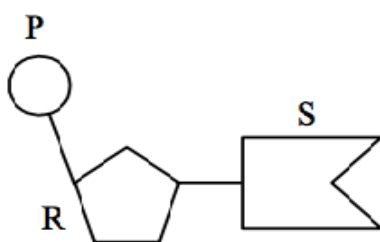


Diagram 6 / Rajah 6

What are P, R and S?

Apakah P, R dan S?

	P	R	S
A	Nucleotide <i>Nukleotida</i>	Phosphate <i>Fosfat</i>	Deoxyribose sugar <i>Gula deoksiribosa</i>
B	Phosphate <i>Fosfat</i>	Deoxyribose sugar <i>Gula deoksiribosa</i>	Nitrogenous base <i>Bes Bernitrogen</i>
C	Phosphate <i>Fosfat</i>	Nucleotide <i>Nukleotida</i>	Nitrogenous base <i>Bes Bernitrogen</i>
D	Nitrogenous base <i>Bes Bernitrogen</i>	Phosphate <i>Fosfat</i>	Nucleotide <i>Nukleotida</i>

- 8 Diagram 7 shows a tree map of the essential elements which are important to living organisms.
Rajah 7 menunjukkan peta pokok bagi unsur utama yang penting untuk organisma hidup.

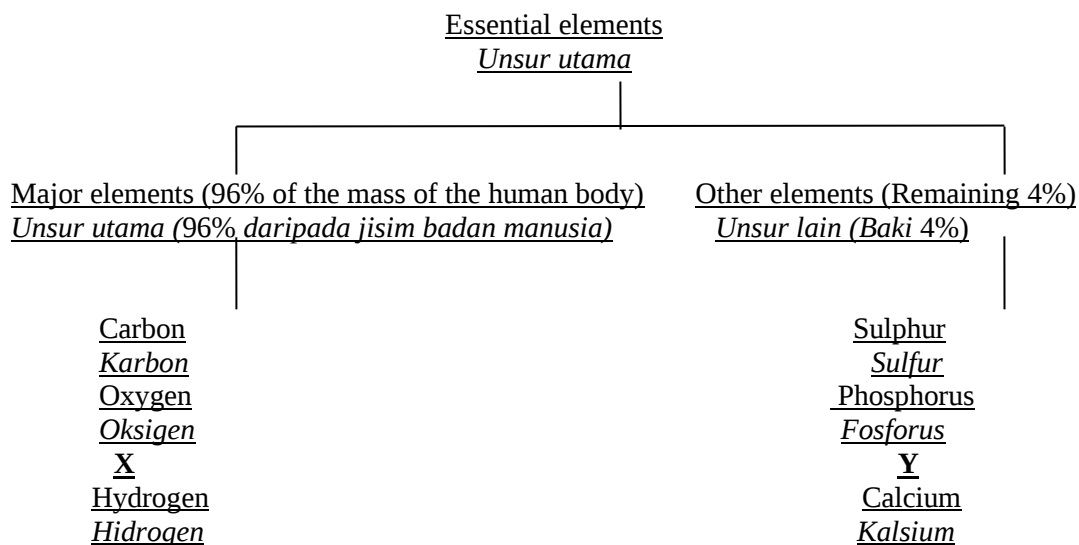


Diagram 7 / Rajah 7

What are the elements of X and Y?

Apakah unsur-unsur X dan Y?

	Element X Unsur X	Element Y Unsur Y
A	Magnesium <i>Magnesium</i>	Nitrogen <i>Nitrogen</i>
B	Magnesium <i>Magnesium</i>	Chlorine <i>Klorin</i>
C	Potassium <i>Kalium</i>	Sodium <i>Natrium</i>
D	Nitrogen <i>Nitrogen</i>	Ferum <i>Besi</i>

- 9 Which of the following are true about saturated fats?
Yang manakah antara berikut benar tentang lemak tepu?
- I Low content of cholesterol
Kandungan kolesterol rendah
- II Solid form at room temperature
Berbentuk pepejal pada suhu bilik
- III Maximum content of hydrogen atoms
Kandungan atom hidrogen maksimum
- IV At least one double bond between the carbon atoms
- A I and IV only
I dan IV sahaja
- B I, II and III only
I, II dan III sahaja
- C II and III only
II dan III sahaja
- D II, III and IV only
II, III dan IV sahaja

10 Diagram 8 shows the 'lock and key' hypothesis of enzyme action.

Rajah 8 menunjukkan hipotesis 'mangga dan kunci' bagi tindakan enzim.

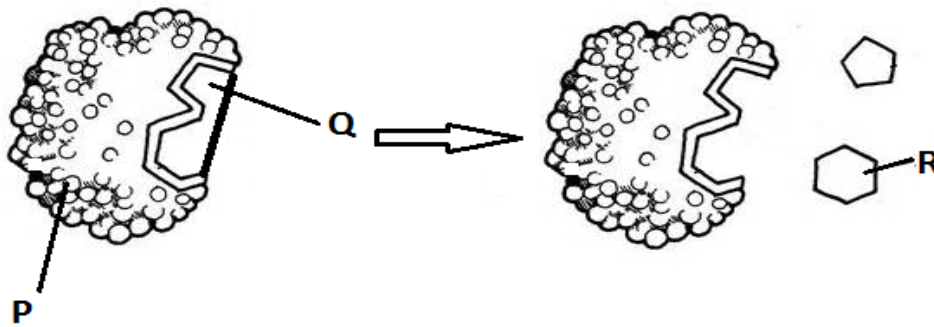


Diagram 8 / Rajah 8

What are P, Q and R?

Apakah P, Q dan R?

	P	Q	R
A	Substrate <i>Substrat</i>	Enzyme <i>Enzim</i>	Product <i>Hasil</i>
B	Enzyme <i>Enzim</i>	Substrate <i>Substrat</i>	Product <i>Hasil</i>
C	Product <i>Hasil</i>	Enzyme <i>Enzim</i>	Substrate <i>Substrat</i>
D	Product <i>Hasil</i>	Substrate <i>Substrat</i>	Enzyme <i>Enzim</i>

11 Diagram 9 shows a bowl of marinate meat with papaya leaves.

Rajah 9 menunjukkan semangkuk daging yang diperap bersama dengan daun betik.

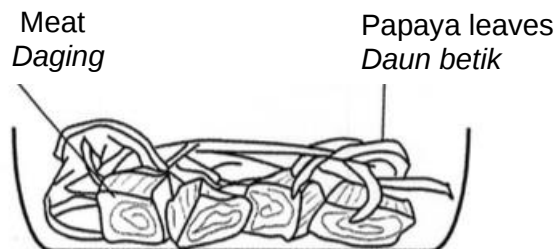


Diagram 9 / Rajah 9

What is the purpose of using papaya leaves ?

Apakah tujuan menggunakan daun betik tersebut?

- A To trap heat
Untuk memerangkap haba
- B To soften the meat
Untuk melembutkan daging
- C To digest the fat in the meat
Untuk mencernakan lemak di dalam daging
- D To add flavor to the meat
Untuk menambah rasa pada daging

- 12 Diagram 10 shows two dresses, **M** and **N** that were stained with blood. The dresses were washed with washing powder that contain enzyme **X** at different temperatures.

*Rajah 10 menunjukkan dua helai baju, **M** dan **N** yang mempunyai kesan darah. Baju-baju tersebut dicuci dengan serbuk pencuci yang mengandungi enzim **X** pada suhu yang berbeza.*

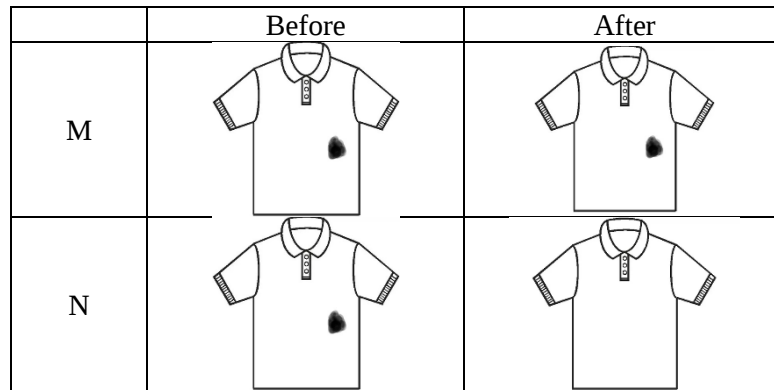


Diagram 10 / Rajah 10

What is enzyme **X** and a possible temperature that were used for **M** and **N**?

*Apakah enzim **X** dan suhu yang mungkin telah digunakan untuk **M** dan **N**?*

	Enzyme X <i>Enzim X</i>	Temperature for M (°C) <i>Suhu untuk M (°C)</i>	Temperature for N (°C) <i>Suhu untuk N (°C)</i>
A	Protease	10	35
B	Protease	35	10
C	Lipase	10	35
D	Lipase	35	10

- 13 Diagram 11 shows a cell cycle.
Rajah 11 menunjukkan satu kitar sel.

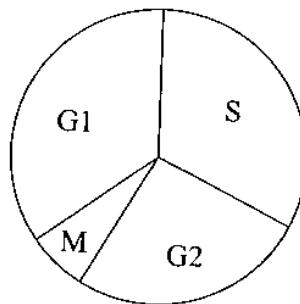


Diagram 11 / Rajah 11

Which stage does DNA replication takes place?

Peringkat manakah replikasi DNA berlaku?

- A G1 B G2 C S D M

- 14** A cell in a goldfish has 94 chromosomes. How many chromosomes in the daughter cell that are formed through mitosis?
Sel ikan emas mengandungi 94 kromosom. Berapakah bilangan kromosom dalam sel anak yang terbentuk melalui mitosis?

A 47 B 94 C 142 D 188

- 15** Diagram 12 shows a phase of mitosis in an animal cell.
Rajah 12 menunjukkan satu fasa mitosis dalam sel haiwan.

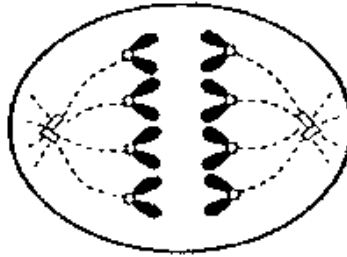


Diagram 12 / Rajah 12

What is the phase?
Apakah fasa tersebut?

A Prophase B Metaphase C Anaphase D Telophase
Profasa Metafasa Anafasa Telofasa

- 16** Diagram 13 shows a stage during of cell division.
Rajah 13 menunjukkan satu peringkat dalam pembahagian sel.

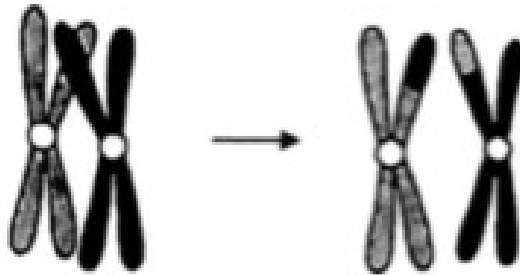


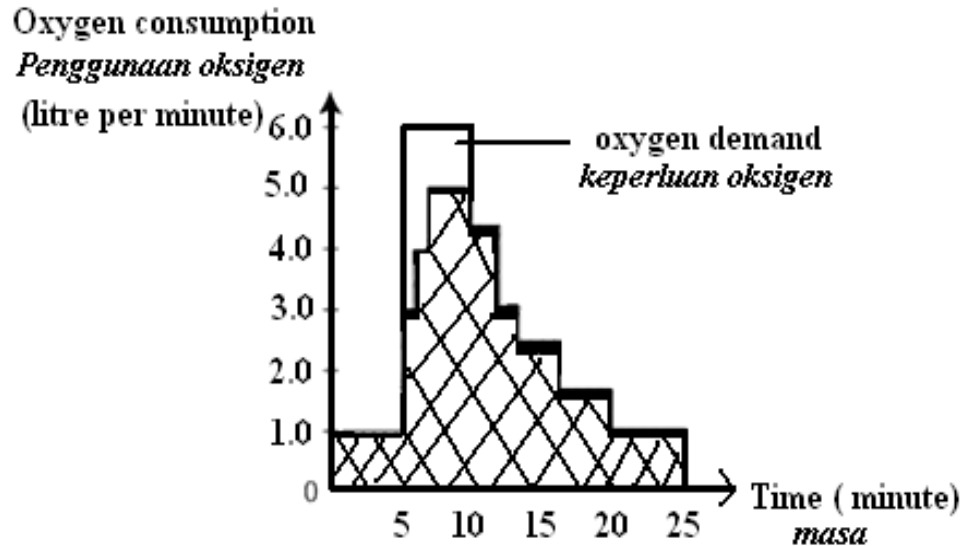
Diagram 13 / Rajah 13

In which part of a plant does this process takes place?
Pada bahagian tumbuhan yang manakah berlakunya peringkat ini?

A Anther C Sepal
Anter Sepal
 B Filament D Pistil
Filamen Pistil

- 17 Graph 1 below shows the oxygen consumption of a student before, during and after exercises.

Graf 1 di bawah menunjukkan penggunaan oksigen oleh seorang pelajar sebelum, semasa dan selepas menjalani latihan.



Graph 1 / Graf 1

Which of the following statement is true?

Manakah di antara pernyataan – pernyataan berikut adalah benar?

- A The shaded part represents the supply of oxygen.
Bahagian yang berlorek mewakili bekalan oksigen.
- B The student exercise from the fifth minute till the twentieth minute.
Pelajar berlatih dari minit ke lima sehingga minit kedua puluh.
- C Oxygen demand in the graph is the amount of oxygen used to pay off the oxygen debt.
Keperluan oksigen di dalam graf adalah jumlah oksigen yang digunakan untuk membayar hutang oksigen.
- D The rate of respiration increases after the tenth minute.
Kadar respirasi bertambah selepas minit ke sepuluh.
- 18 Which of the following changes occurs to an organism during cellular respiration?
Antara perubahan berikut, yang manakah berlaku pada sesuatu organisma semasa respirasi sel?

	Dry mass Unsur X	Oxygen Oksigen
A	Gain Bertambah	Release Dibebaskan
B	Gain Bertambah	Uptake Diambil
C	Loss Berkurang	Release Dibebaskan
D	Loss Berkurang	Uptake Diambil

- 19 Which of the following comparisons between aerobic respiration and fermentation in human muscle is correct?

Antara yang berikut, yang manakah membandingkan respirasi aerob dan fermentasi dalam otot manusia dengan betul?

	Aerobic respiration <i>Respirasi aerob</i>	Fermentation <i>Fermentasi</i>
A	No oxygen is consumed <i>Tiada oksigen digunakan</i>	Oxygen is consumed <i>Oksigen digunakan</i>
B	Large amount of ATP is produced <i>Jumlah ATP yang banyak dihasilkan</i>	Small amount of ATP is produced <i>Jumlah ATP yang sedikit dihasilkan</i>
C	Lactic acid is produced <i>Asid laktik dihasilkan</i>	Ethanol is produced <i>Etanol dihasilkan</i>
D	Glucose is oxidised <i>Glukosa dioksidakan</i>	No glucose is oxidised <i>Tiada glukosa dioksidakan</i>

- 20 Lactic acid accumulated in an athlete's muscles after taking part in 200 m sprint.

Which of the following contribute to the situation?

Asid laktik terkumpul di dalam otot seorang atlet selepas mengambil bahagian dalam 200m lari pecut.

Antara berikut yang manakah menyumbang kepada situasi tersebut?

- A Aerobic respiration in muscles increases
Respirasi aerob di dalam otot meningkat
- B Aerobic respiration in muscles decreases
Respirasi aerob di dalam otot menurun
- C Anaerobic respiration in muscles increases
Respirasi anaerob di dalam otot meningkat
- D Anaerobic respiration in muscles decreases
Respirasi anaerob di dalam otot menurun
- 21 Diagram 14 shows the tracheal system of insects and the human respiratory system.

Rajah 14 menunjukkan sistem trakea serangga dan sistem respirasi manusia.

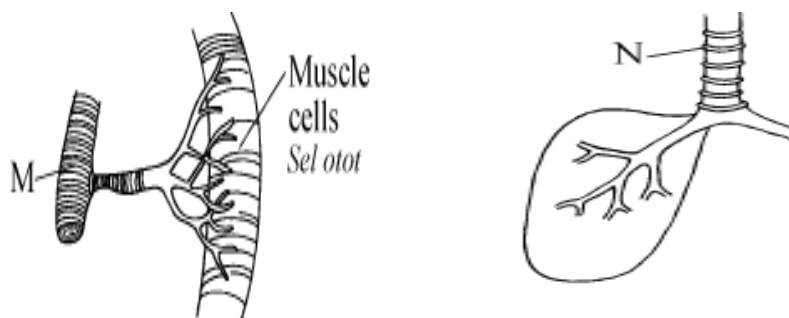


Diagram 14 / Rajah 14

What is the similarity of structures labelled M and N?

Apakah persamaan antara struktur yang berlabel M dan N?

- A. Provides a large surface area for gaseous exchanges.
Memberi satu luas permukaan yang besar bagi pertukaran gas.
- B. Prevents from collapsing.
Mengelakkan daripada runtuh.
- C. Protects this part from injury.
Melindungi bahagian ini daripada kecederaan.
- D. Prevents diffusion of water into it.
Mengelakkan resapan air ke dalamnya.

- 22 Diagram 15 shows the structure of a human alveolus.
Rajah 15 menunjukkan struktur satu alveolus manusia.

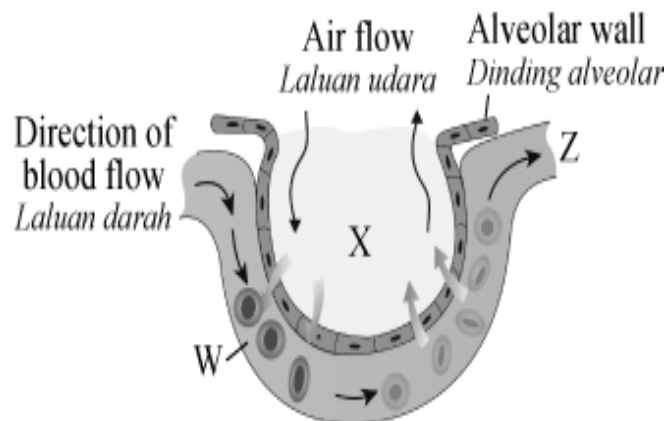


Diagram 15 / Rajah 15

Which of the following is **not** true about the structure above?

Antara yang berikut, manakah **tidak** benar mengenai struktur di atas?

- A The partial pressure of oxygen is higher in X compared to the partial pressure of oxygen in W.
Tekanan separa oksigen lebih tinggi dalam X berbanding dengan tekanan separa oksigen dalam W.
- B The blood capillaries in the body will transport the carbon dioxide from X to W.
Kapilari darah dalam badan akan mengangkut karbon dioksida dari X ke W.
- C The X and Z are similar, in that they have high partial pressure of oxygen.
X dan Z ialah sama, mereka mempunyai tekanan separa oksigen yang tinggi.
- D W has higher partial pressure of carbon dioxide compared to Z.
W mempunyai tekanan karbon dioksida separa yang tinggi berbanding dengan Z.

- 23 What will happen if alveoli are torn and punctured?

Apakah yang akan berlaku sekiranya alveolus terkoyak dan bocor?

- | | | | |
|---|------------------------------------|---|-------------------------------|
| A | Gasping
<i>Tercungap-cungap</i> | C | Shivering
<i>Menggigil</i> |
| B | Sneezing
<i>Bersin</i> | D | Coughing
<i>Batuk</i> |

- 24 Which mechanism will occur if the pH value of blood decreases?

Mekanisma manakah yang akan berlaku jika nilai pH darah menurun?

- A Breathing and ventilation rate increase
Kadar pernafasan dan ventilasi meningkat
- B Breathing and ventilation rate decrease
Kadar pernafasan dan ventilasi menurun
- C Breathing rate decreases but ventilation rate increases
Kadar pernafasan menurun tetapi kadar ventilasi meningkat
- D Breathing rate increases but ventilation rate decreases
Kadar pernafasan meningkat tetapi kadar ventilasi menurun

- 25 The following measurements were made during an experiment to determine the energy value of food F.

Bacaan berikut diambil semasa eksperimen untuk menentukan nilai tenaga dalam makanan F.

Mass of food F / *Jisim makanan F* = 4 g

Mass of water / *jisim air* = 10 g

Initial water temperature / *Suhu awal air* = 28°C

Final water temperature / *Suhu akhir air* = 60°C

What is the energy value of food F?

Apakah nilai tenaga makanan F?

- | | |
|------------------------|------------------------|
| A. 240Jg ⁻¹ | B. 336Jg ⁻¹ |
| C. 448Jg ⁻¹ | D. 484Jg ⁻¹ |

- 26 A patient had undergone an operation to discard his gall bladder. Which statement is **correct** about the patient?

Seorang pesakit telah menjalani pembedahan untuk membuang pundi hempedunya.

*Antara pernyataan berikut yang manakah **benar** tentang pesakit tersebut?*

- A Liver cannot produce bile
Hati pesakit tidak lagi menghasilkan jus hempedu
- B Protein digestion in the duodenum is interrupted
Pencernaan protein dalam duodenum terganggu
- C Need to undergo chemotherapy treatment life time
Pesakit harus menjalani kimoterapi sepanjang hayatnya
- D Less intake of fatty food
Pesakit itu harus mengurangkan pengambilan makanan yang berlemak

- 27 Diagram 16 shows longitudinal section of villus.
Rajah 16 menunjukkan keratan memanjang struktur vilus.

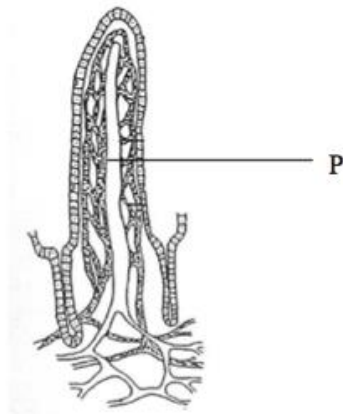


Diagram 16 / Rajah 16

Which substances is absorbed into structure P?

Bahan manakah yang diserap ke dalam struktur P?

- | | |
|---|---|
| A Glycerol and vitamin D
<i>Gliserol dan Vitamin D</i> | C Fatty acid and Vitamin C
<i>Asid lemak dan Vitamin C</i> |
| B Glucose and amino acid
<i>Glukosa dan asid amino</i> | D Amino acid and fatty acid
<i>Asid amino dan asid lemak</i> |
- 28 Diagram 17 shows a part of the human digestive system.
Rajah 17 menunjukkan bahagian sistem pencernaan manusia.

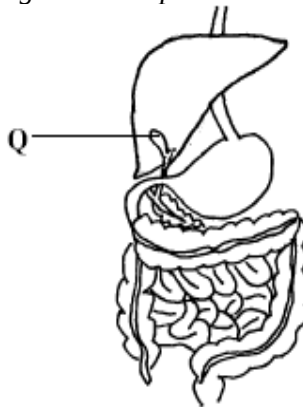


Diagram 17 / Rajah 17

Which of the following menu is suitable for a patient whose organ Q is dysfunctional?

Antara menu berikut, manakah sesuai untuk pesakit yang organ Q beliau gagal berfungsi?

- A Fried fish and steamed rice
Ikan goreng dan nasi kukus
- B Steamed fish and steamed rice
Ikan kukus dan nasi kukus
- C Steamed chicken and fried rice
Ikan kukus dan nasi goreng
- D Fried chicken and steamed rice
Ayam goreng dan nasi kukus

29 What is the function of the Atrioventricular Node (AVN)?

Apakah fungsi bagi nodus atrioventrikal (AVN)?

- A. It conducts nerve impulses to the ventricles
Ia mengarahkan impuls ke ventrikel
- B. It causes the relaxation of the heart ventricles.
Ia menyebabkan ventrikel jantung relax.
- C. It coordinates the heartbeat.
Ia mengkoordinasi degupan jantung
- D. It cause the relaxation of the heart muscles
Ia menyebabkan otot jantung berehat.

30 Diagram 18 shows a bar chart of carbon dioxide concentrations in blood samples taken from different blood vessels.

Rajah 18 menunjukkan carta palang bagi kepekatan karbon dioksida dalam sampel darah yang diambil daripada salur darah yang berlainan.

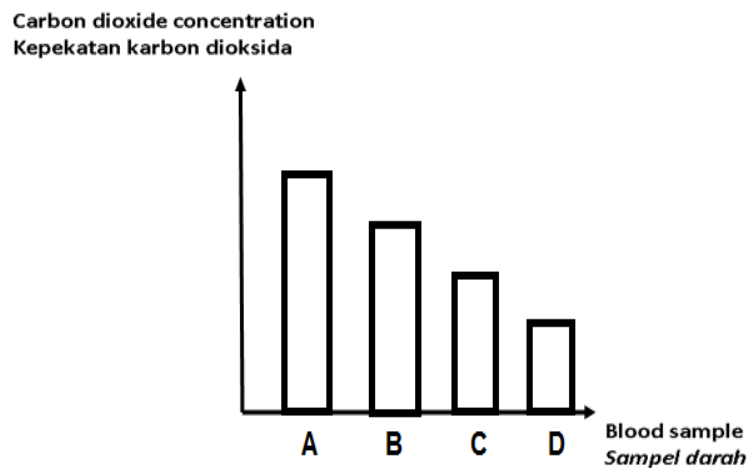


Diagram 18 / Rajah 18

Which blood samples A, B, C or D is taken from pulmonary artery?

Antara sampel darah A, B, C atau D, yang manakah diambil daripada arteri pulmonari?

31 The following statement is about circulatory system.

Pernyataan yang berikut, adalah mengenai sistem peredaran.

Multicellular organism such as a flatworm does not need a circulatory system.
Organisma multisel seperti cacing pipih tidak memerlukan sistem peredaran.

Which is true about the statement?

Yang manakah benar berkenaan pernyataan di atas?

- A. The size of its body is small.
Saiz badannya yang kecil
- B. It does not have a complex body system.
Tidak mempunyai system badan yang kompleks

- C. The total surface area of its body is large.
Mempunyai jumlah luas permukaan yang besar
- D. The ratio of total surface area to volume is large.
Mempunyai nisbah jumlah luas permukaan per isipadu yang besar
- 32 A gardener experiences non-stop bleeding after hurting his foot while gardening. What will happen if his blood is unable to clot?
Seorang pekebun mengalami pendarahan tidak berhenti setelah kakinya tercedera semasa berkebun. Apakah akan terjadi jika darahnya tidak dapat membeku?
- A. Blood pressure decreases
Tekanan darah menurun
- B. Blood capillaries enlarge
Kapilari darah membesar
- C. The rate of heart beat increases
Kadar denyuran jantung bertambah
- D. The rate of respiration increases
Kadar respirasi bertambah
- 33 What is true about the importance of secondary growth in plants?
Manakah benar mengenai kepentingan pertumbuhan sekunder di dalam tumbuhan?
- I. It increases the diameters of the plant stems and roots for mechanical support.
Ia menambahkan diameter batang tumbuhan dan akar untuk sokongan mekanikal.
- II. It allows plants to increase in length to achieve maximum height.
Ia membolehkan tumbuhan menambahkan ketinggian untuk mencapai ketinggian yang maksimum.
- III. It produces new phloem and xylem tissues to replace the old and damaged ones.
Ia menghasilkan tisu floem dan xylem yang baru untuk menggantikan tisu yang telah tua dan rosak.
- IV. It produces a thick bark which reduces the evaporation of water from the surfaces of the stem.
Ia menghasilkan kulit kayu yang tebal untuk mengurangkan penyejatan air daripada permukaan batang tumbuhan.
- A. I, II and III only
I, II dan III sahaja
- C. II, III and IV only
II, III dan IV sahaja
- B. I, III and IV only
I, III dan IV sahaja
- D. I, II, III and IV
I, II, III dan IV

- 34 Diagram 19 shows the longitudinal section of a plant root.
Rajah 19 menunjukkan bahagian pemanjangan akar tumbuhan.

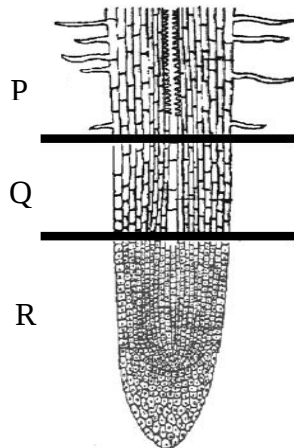


Diagram 19 / Rajah 19

Which zone produce new cells actively?

Di zon manakah sel-sel baru dihasilkan secara aktif?

- | | | | |
|---|---------------------------------------|---|---------------------------------------|
| A | R only
<i>R sahaja</i> | C | Q and R only
<i>Q dan R sahaja</i> |
| B | P and Q only
<i>P dan Q sahaja</i> | D | P, Q and R
<i>P, Q dan R</i> |
- 35 Diagram 20 below shows a cross-section of a dicotyledonous stem which had secondary growth.
Rajah 20 menunjukkan keratan rentas batang dikotiledon yang telah mengalami pertumbuhan sekunder.

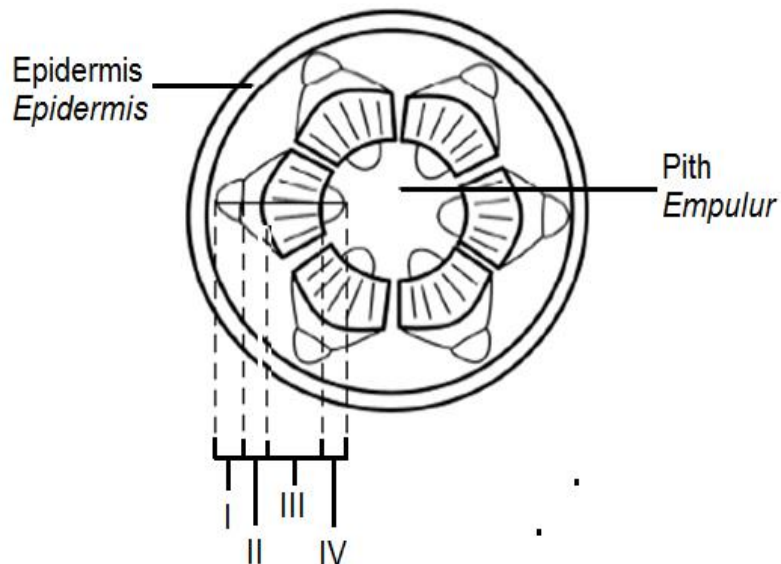


Diagram 20 / Rajah 20

Which arrangement of the tissues is correct?

Susunan tisu-tisu yang manakah betul?

	I	II	III	IV
A	Primary phloem <i>Floem primer</i>	Secondary phloem <i>Floem sekunder</i>	Secondary xylem <i>Xilem sekunder</i>	Primary xylem <i>Xilem primer</i>
B	Secondary phloem <i>Floem sekunder</i>	Primary phloem <i>Floem primer</i>	Secondary phloem <i>Floem sekunder</i>	Secondary xylem <i>Xilem sekunder</i>
C	Secondary phloem <i>Floem sekunder</i>	Secondary xylem <i>Xilem sekunder</i>	Secondary phloem <i>Floem sekunder</i>	Primary phloem <i>Floem primer</i>
D	Secondary xylem <i>Xilem sekunder</i>	Secondary phloem <i>Floem sekunder</i>	Primary phloem <i>Floem primer</i>	Secondary phloem <i>Floem sekunder</i>

- 36 Diagram 21 shows a across section of a leaf.
Rajah 21 menunjukkan keratan rentas sehelai daun.

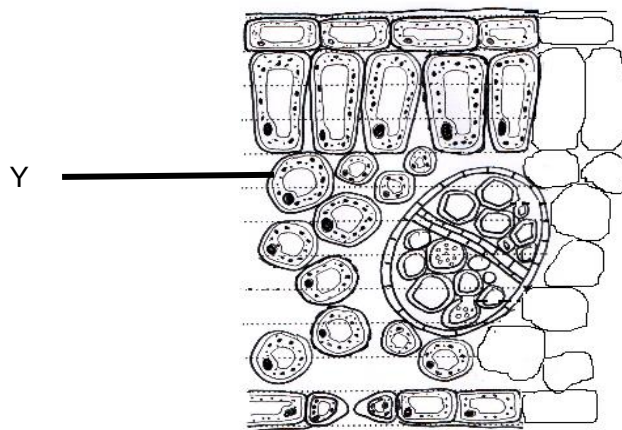


Diagram 21 / Rajah 21

What is the adaptation of the structure Y to optimize photosynthesis?
Apakah penyesuaian struktur Y untuk mengoptimumkan fotosintesis?

- A Have a lot of of mitochondria.
Mempunyai banyak mitokondria.
- B The cells are loosely arranged.
Sel-sel disusun longgar.
- C The cells are closely arranged.
Sel-sel disusun rapat.
- D Cylindrical cell arranged end to end.
Sel berbentuk silinder tersusun hujung ke hujung.

- 37 Table 1 shows the differences between light-dependent reaction and light-independent reaction during photosynthesis.

Jadual 1 menunjukkan perbezaan antara tindak balas berdasarkan cahaya dan tindak balas tidak berdasarkan cahaya semasa fotosintesis.

	Light-dependent reaction <i>Tindak balas berdasarkan cahaya</i>	Light-independent reaction <i>Tindak balas tidak berdasarkan cahaya</i>
K	Takes place in the stroma <i>Berlaku dalam stroma</i>	Takes place in the grana <i>Berlaku dalam granum</i>
L	Oxygen is released <i>Oksigen terbebas</i>	Oxygen is not released <i>Oksigen tidak terbebas</i>
M	Occurs during daytime <i>Berlaku pada waktu siang</i>	Occurs at night <i>Berlaku pada waktu malam</i>
N	Glucose is not formed <i>Glukosa tidak terbentuk</i>	Glucose is formed <i>Glukosa terbentuk</i>

Which of the following shows the correct differences?

Antara yang berikut, yang manakah menunjukkan perbezaan yang betul?

- A K and L only
K dan L sahaja
- B K and M only
K and M sahaja
- C L and M only
L dan M sahaja
- D L and N only
L dan N sahaja
- 38 Diagram 22 shows the emission and intake of carbon dioxide at different light intensity.
Rajah 22 menunjukkan pembebasan dan pengambilan karbon dioksida pada keamatan cahaya yang berbeza.

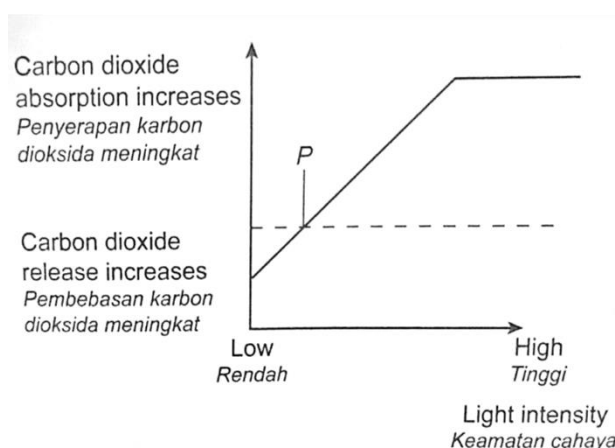


Diagram 22 / Rajah 22

Explain what happened at point P.

Terangkan apa yang berlaku pada titik P.

- A Rate of carbon dioxide production during respiration is equal to the rate of carbon dioxide consumption during photosynthesis
Kadar penghasilan karbon dioksida semasa respirasi adalah sama dengan kadar penggunaan karbon dioksida semasa fotosintesis.

- B Rate of carbon dioxide production during respiration is higher than the rate of carbon dioxide consumption during photosynthesis.
Kadar penghasilan karbon dioksida semasa respirasi adalah lebih tinggi daripada kadar penggunaan karbon dioksida semasa fotosintesis.
- C Rate of carbon dioxide production during respiration is lower than the rate of carbon dioxide consumption during photosynthesis.
Kadar penghasilan karbon dioksida semasa respirasi adalah lebih rendah daripada kadar penggunaan karbon dioksida semasa fotosintesis.
- D Rate of carbon dioxide production during respiration is not equal to the rate of carbon dioxide consumption during photosynthesis.
Kadar penghasilan karbon dioksida semasa respirasi adalah tidak sama dengan kadar penggunaan karbon dioksida semasa fotosintesis.
- 39 Diagram 23 shows the cross section of structure Z in a plant.
Rajah 23 menunjukkan keratan rentas struktur Z pada suatu tumbuhan.

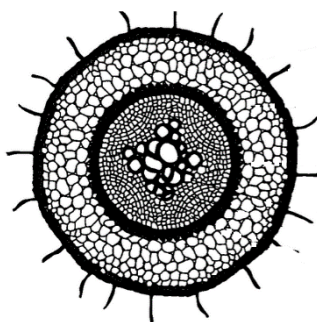


Diagram 23 / Rajah 23

Which of the following correctly name the structure Z and the type of the plant?
Antara yang berikut, yang manakah menamakan struktur Z dan jenis tumbuhan dengan betul?

	Structure Z <i>Struktur Z</i>	Type of the plant <i>Jenis tumbuhan</i>
A	Stem <i>Batang</i>	Monocotyledon plant <i>Tumbuhan monokotiledon</i>
B	Stem <i>Batang</i>	Eudicotyledon plant <i>Tumbuhan eudicot</i>
C	Root <i>Akar</i>	Monocotyledon plant <i>Tumbuhan monokotiledon</i>
D	Root <i>Akar</i>	Eudicotyledon plant <i>Tumbuhan eudicot</i>

- 40** The plant is found on other larger plants but do not harm the host plant. What is this plant?
Tumbuhan ini didapati pada tumbuhan lain yang lebih besar tetapi tidak mengancam tumbuhan perumah. Apakah tumbuhan ini?

- A Epiphytic plants
 Tumbuhan epifit
- B Parasitic plants
 Tumbuhan parasit
- C Saprophytic plants
 Tumbuhan saprofit
- D Carnivorous plants
 Tumbuhan karnivor

KERTAS SOALAN TAMAT