4551/1
BIOLOGI
KERTAS 1
OGOS 2025
1 JAM 15 MINIT

NO KAD PENGENALAN

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Nama Pelajar :.....

Tingkatan :.....

MAJLIS PENGETUA SEKOLAH MALAYSIA (MPSM)
(CAWANGAN KELANTAN)

MODUL KOLEKSI ITEM
PERCUBAAN SPM
2025

BIOLOGI
KERTAS 1
MASA : SATU JAM LIMA BELAS MINIT

ARAHAN:

1. Kertas ini mengandungi 40 soalan
2. Jawab semua soalan
3. Tiap-tiap soalan diikuti empat jawapan yang berhuruf A, B, C dan D. Bagi tiap-tiap soalan pilih satu jawapan sahaja. Tandakan semua jawapan anda pada kertas jawapan objektif yang disediakan.

Kertas soalan ini mengandungi **37** halaman bercetak

Jawab **semua** soalan

*Answer **all** the question*

1. Antara yang berikut, bahan manakah yang boleh dibuang ke dalam sinki?
Which of the following substances that can be disposed into the sink?

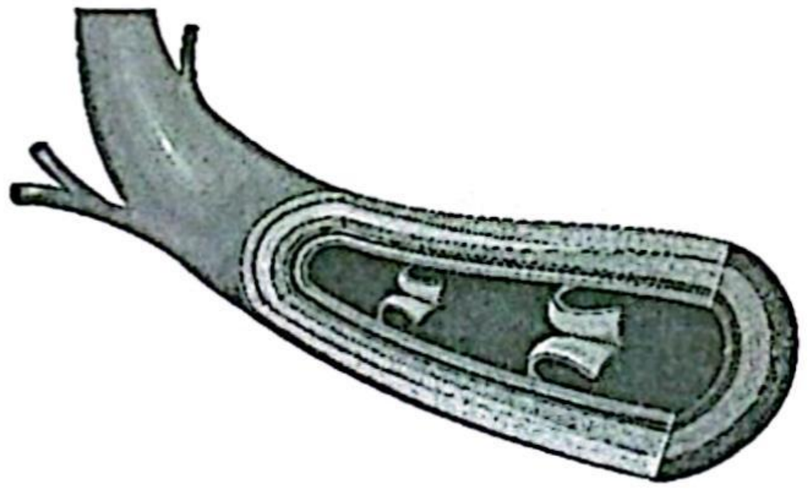
A Benzena
Benzene

B Merkuri
Mercury

C Minyak
Oil

D Larutan pewarna
Dye solution

2. Rajah 1 menunjukkan sejenis salur dalam sistem peredaran darah manusia.
D*iagram* 1 *shows a type of vessel in the human circulatory system.*



Rajah 1 / *Diagram* 1

Antara yang berikut, tisu manakah yang tidak terlibat dalam pembentukan salur tersebut?
Which of the following tissue is not involved in the formation of the vessel?

A Tisu endotelium
Endothelium tissue

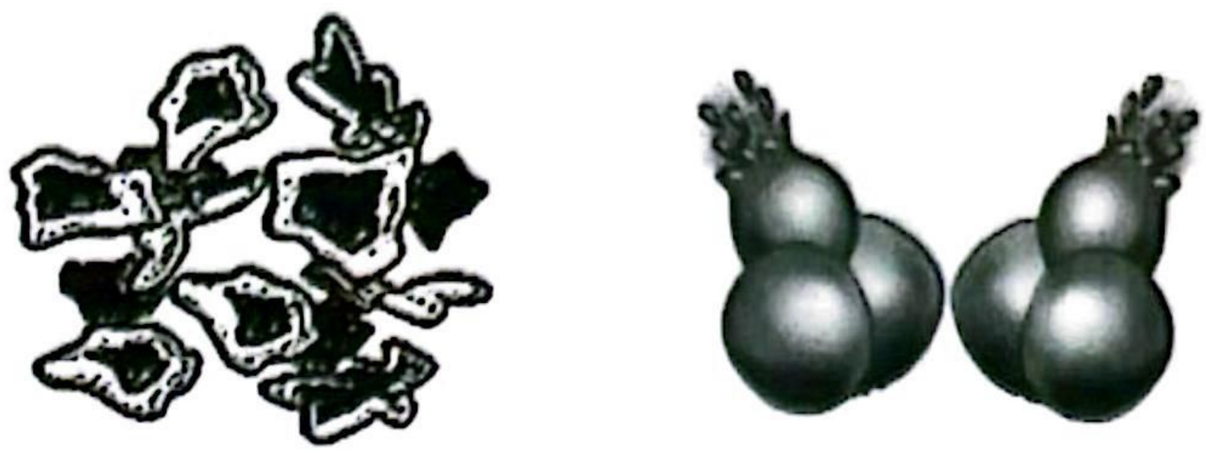
B Tisu otot licin
Smooth muscle tissue

C Tisu penghubung
Connective tissue

D Tisu saraf
Nerve tissue

3. Rajah 2 menunjukkan keadaan eritrosit selepas direndam dalam dua jenis larutan yang berbeza kepekatan.

Diagram 2 shows the condition of erythrocytes after being immersed in two different concentrations of solutions.



Larutan X / *Solution* X Larutan Y / *Solution* Y

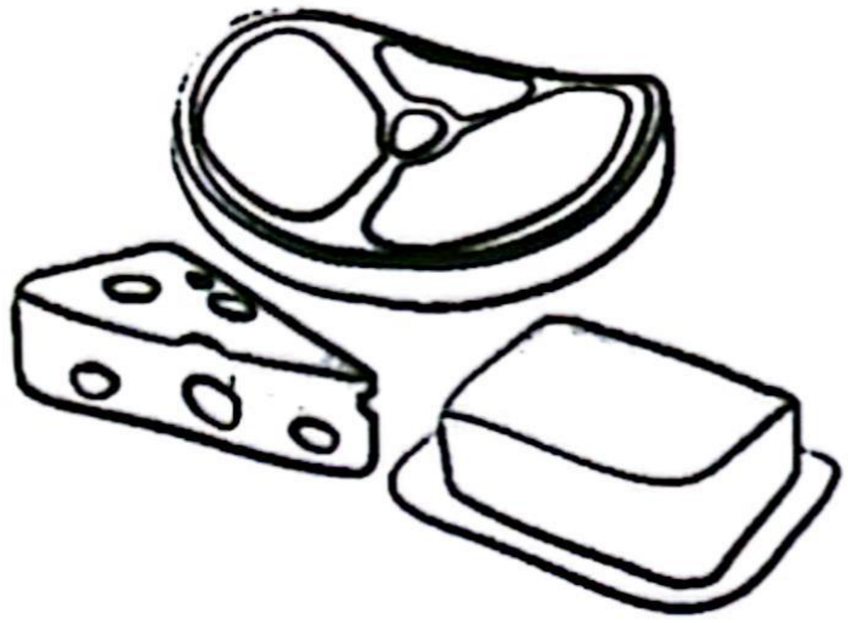
Rajah 2 / *Diagram* 2

Apakah keadaan eritrosit dalam larutan, X dan Y?

What is the condition of erythrocyte in solution, X *and* Y?

	Larutan X *Solution* X	Larutan Y *Solution* Y
A	Plasmolisis *Plasmolysis*	Hemolisis *Heamolysis*
B	Krenasi *Crenation*	Segah *Turgid*
C	Krenasi *Crenation*	Hemolisis *Heamolysis*
D	Plasmolisis *Plasmolysis*	Deplasmolisis *Deplasmolysis*

4. Rajah 3 menunjukkan contoh makanan yang mengandungi lemak.
Diagram 3 shows the examples of foods that contain fat.



Rajah 3 / *Diagram 3*

Antara yang berikut, penyataan manakah yang betul menerangkan lemak tersebut?
Which of the following statement correctly describes the fat?

A Mengandungi sekurang-kurangnya satu ikatan ganda dua antara atom karbon
Contains at least one double bond between the carbon atoms

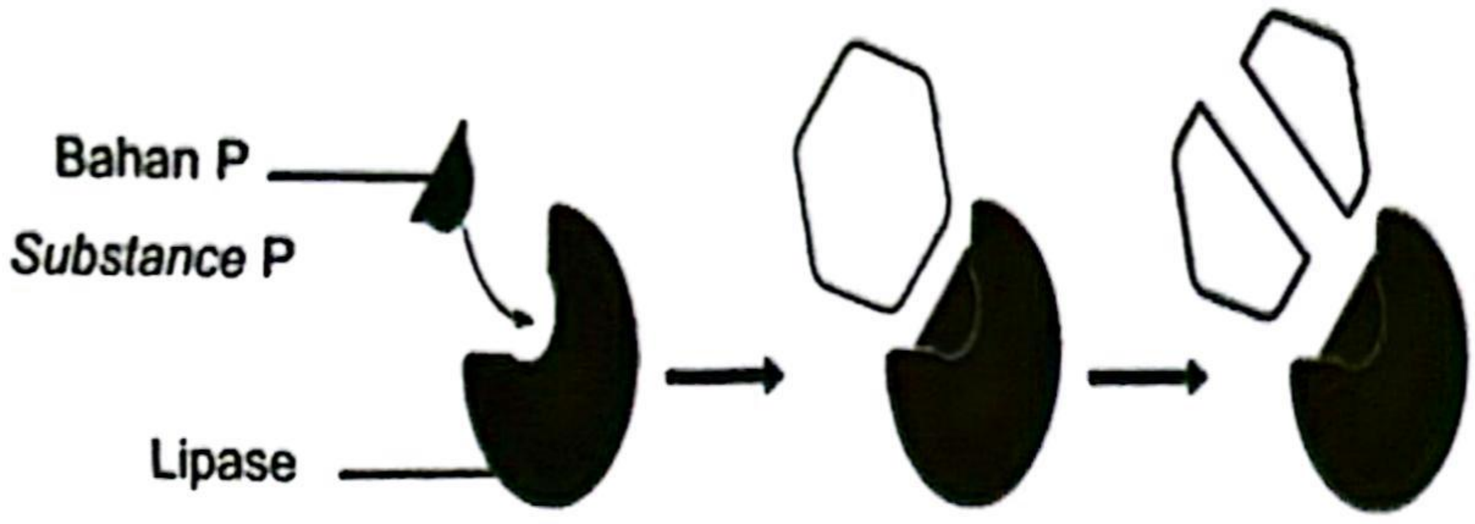
B Mengandungi kandungan kolesterol yang rendah
Contain low cholesterol content

C Ikatan antara atom karbon telah tepu
The bonds between the carbon atoms are saturated

D Mempunyai takat lebur rendah
Has low melting point

5. Rajah 4 menunjukkan proses hidrolisis molekul kompleks oleh enzim.

Diagram 4 shows the process of hydrolysis of complex molecules by enzymes.



Rajah 4 / *Diagram* 4

Apakah bahan P?

What is substance P?

A Vitamin B
Vitamin B

B Plumbum
Lead

C Gliserol
Glycerol

D Lipid
Lipids

6. Rajah 5 menunjukkan sejenis produk yang dihasilkan secara industri menggunakan teknologi imobilisasi enzim.

Diagram 5 shows a type of product that is industrially produced using enzyme immobilization technology.

Rajah 5 / *Diagram* 5

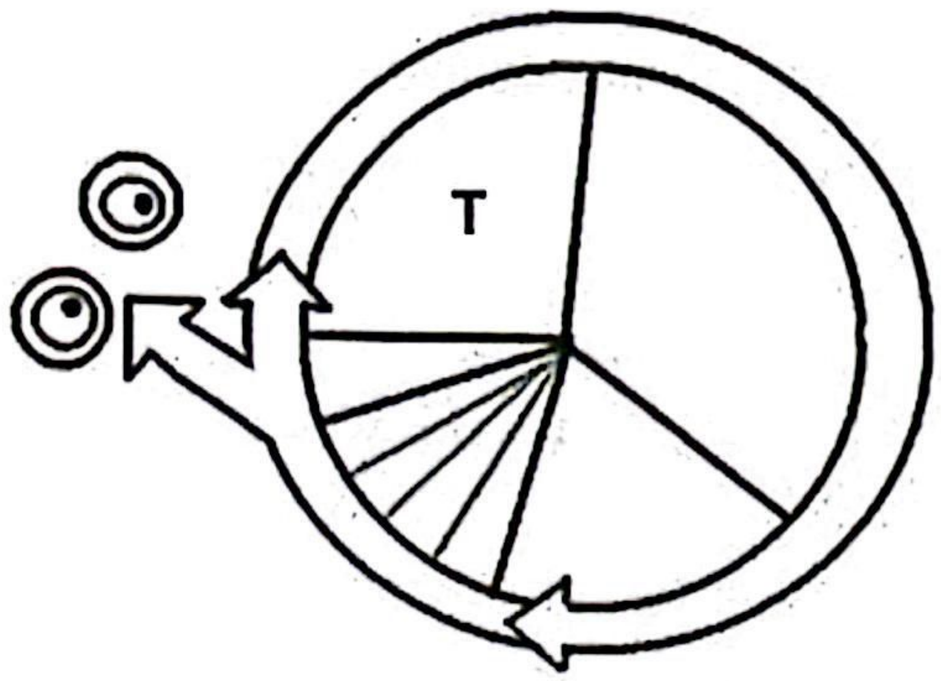
Antara yang berikut, padanan manakah yang paling sesuai dalam penghasilan produk itu?

Which of the following pairings is the most suitable in the production of that product?

	Jenis enzim Type of enzyme	Penerangan *Explanation*
A	Selulase *Cellulase*	Meningkatkan kandungan glukosa dalam jus buah *Increase the content of glucose in fruit juice*
B	Laktase *Lactase*	Menjadikan jus buah bebas laktosa *Makes the fruit juice lactose-free*
C	Pektinase *Pectinase*	Meningkatkan kejernihan jus *Improve juice clarity*
D	Amilase *Amylase*	Mempercepat proses pengekstrakan jus *Speeds up juice extraction process*

7. Rajah 6 menunjukkan fasa dalam kitar sel.

Diagram 6 *shows the phases in the cell cycle.*

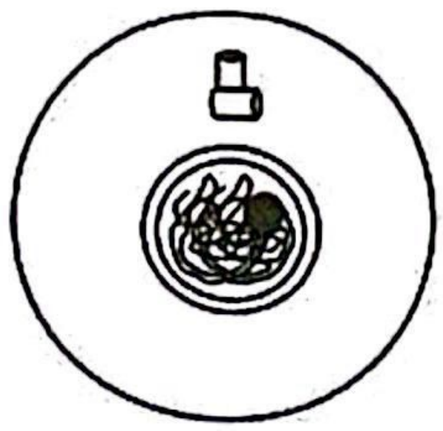


Rajah 6 / *Diagram* 6

Antara yang berikut, yang manakah menunjukkan fasa T?

Which of the following shows phase T?

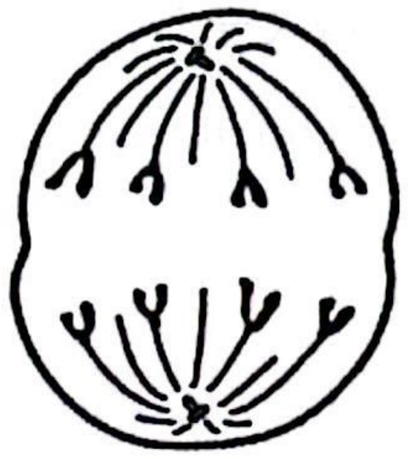
A



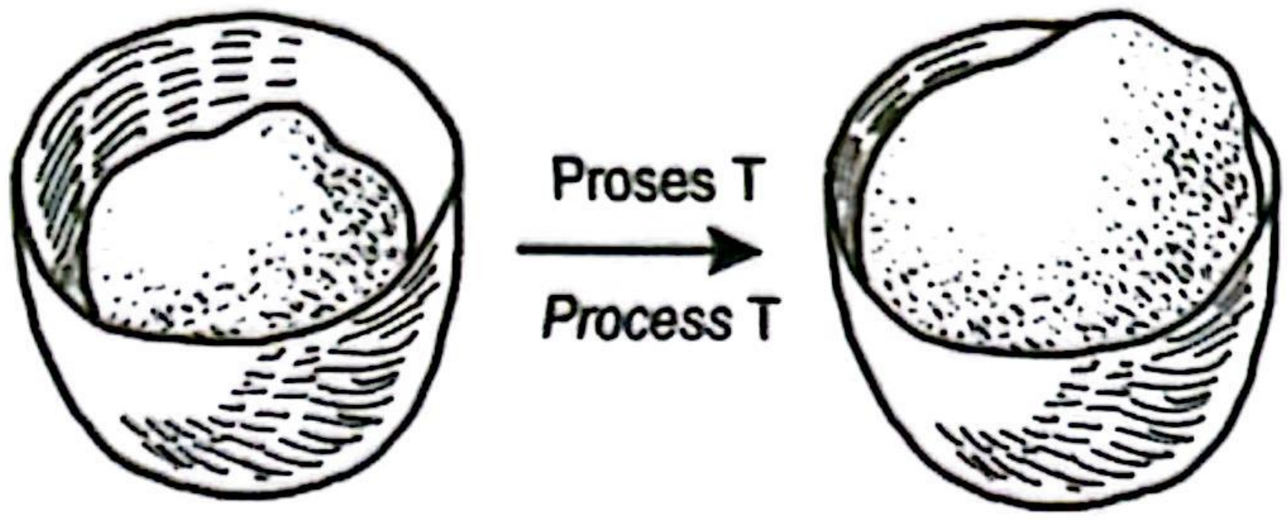
B

C

D



8. Rajah 7 menunjukkan keadaan adunan roti selepas ditambah sejenis mikroorganisma.
Diagram 7 shows the condition of the bread dough after a type of microorganism has been added.



Rajah 7 / *Diagram 7*

Antara yang berikut, persamaan perkataan manakah yang mewakili proses T?
Which of the following word equations represents process T?

A Glukosa + oksigen → Karbon dioksida+ air + tenaga
Glucose + oxygen → Carbon dioxide + water + energy

B Glukosa → Etanol + karbon dioksida + tenaga
Glucose → Ethanol + carbon dioxide + energy

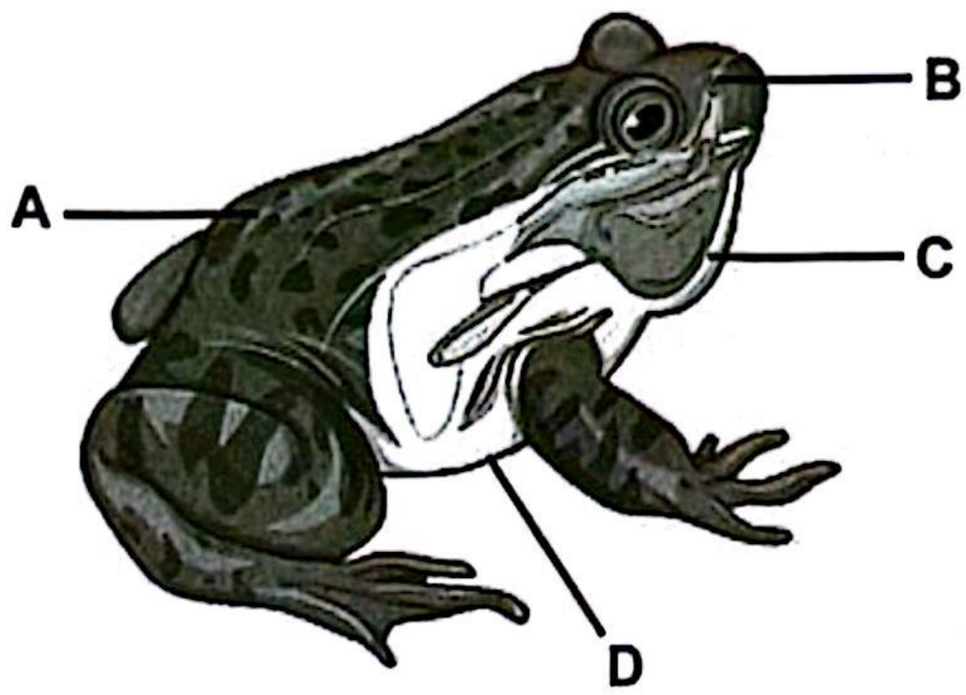
C Glukosa → Asid laktik + tenaga
Glucose → Lactic acid + energy

D Glukosa → Piruvat
Glucose → Pyruvate

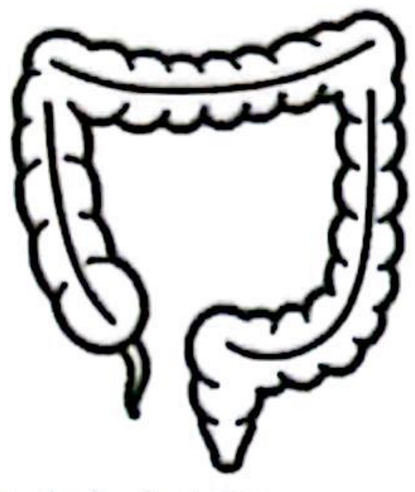
9. Pernyataan berikut adalah berkaitan mekanisme pernafasan dalam katak.
The following statement is related to the respiratory mechanism in frog.

> Tekanan udara rendah disebabkan isi padu udara dalam rongga mulut bertambah apabila struktur **X** diturunkan.
> *Low air pressure is caused by an increase in the volume of air in the oral cavity when structure* **X** *is lowered.*

Antara bahagian berlabel **A**, **B**, **C** dan **D** pada katak, yang manakah menunjukkan struktur **X**?
Which part labelled **A**, **B**, **C** *or* **D** *on the frog, represents structure* **X**?



10. Rajah 8 menunjukkan sebahagian daripada sistem pencernaan manusia.
Diagram 8 shows a part of the human digestive system.



Rajah 8 / *Diagram 8*

Apakah kesan pada fungsi struktur tersebut sekiranya terdapat pengambilan antibiotik berlebihan?
What is the effect on the function of the structure if there is excessive intake of antibiotics?

A Kurang mukus dihasilkan menyebabkan pergerakan tinja lambat
Less mucus production causes slower movement of faeces

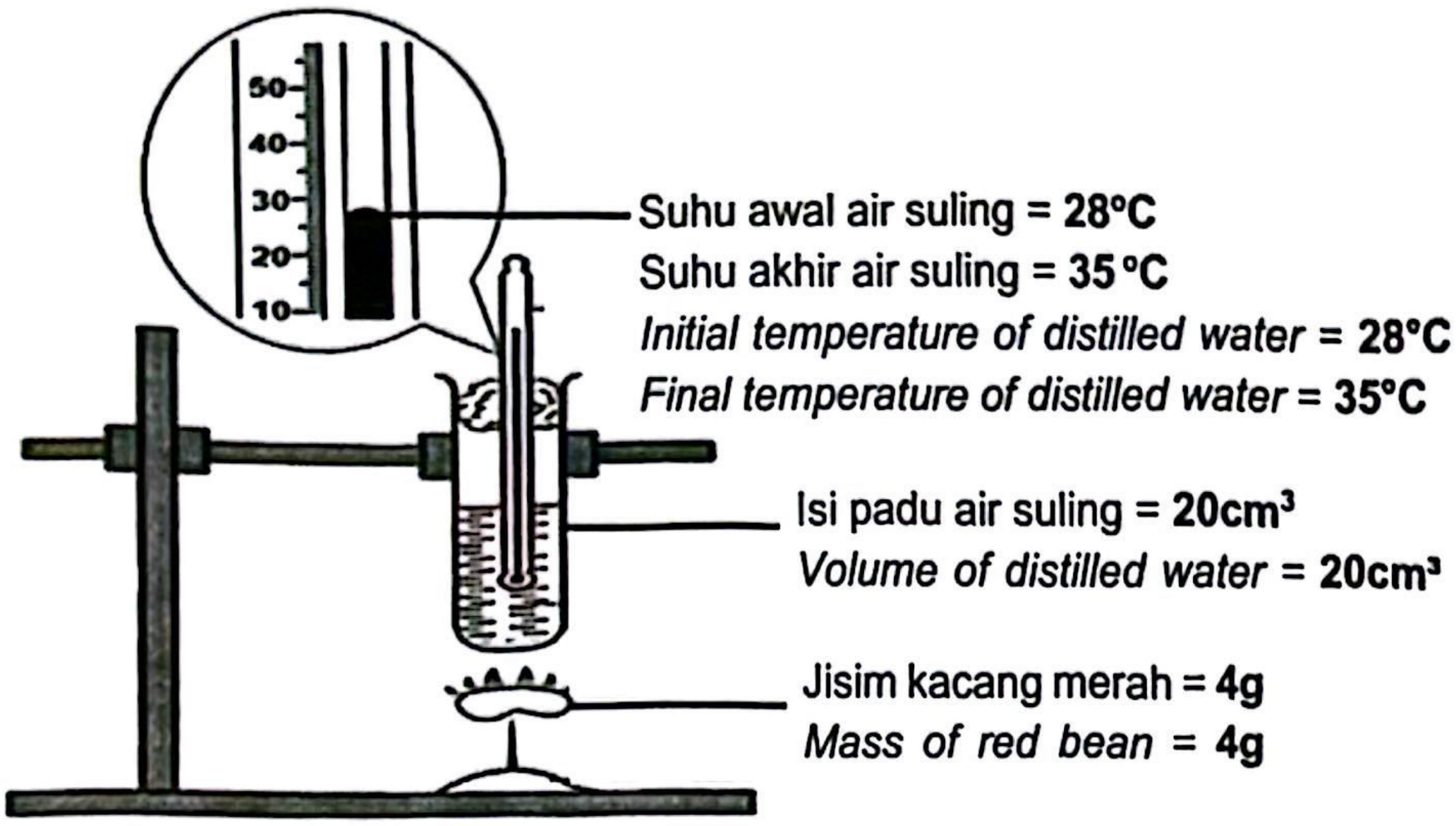
B Penyerapan air dan garam mineral menjadi perlahan
Absorption of water and mineral salts become slower

C Penghasilan asid folik berkurang
Production of folic acid reduce

D Tinja dihasilkan keras
Faeces produced are hard

11. Rajah 9 menunjukkan susunan radas dan bahan satu eksperimen untuk mengkaji nilai tenaga dalam sampel makanan.

Diagram 9 shows the apparatus and materials setup of an experiment to investigate the energy value in a food sample.



Rajah 9 / *Diagram 9*

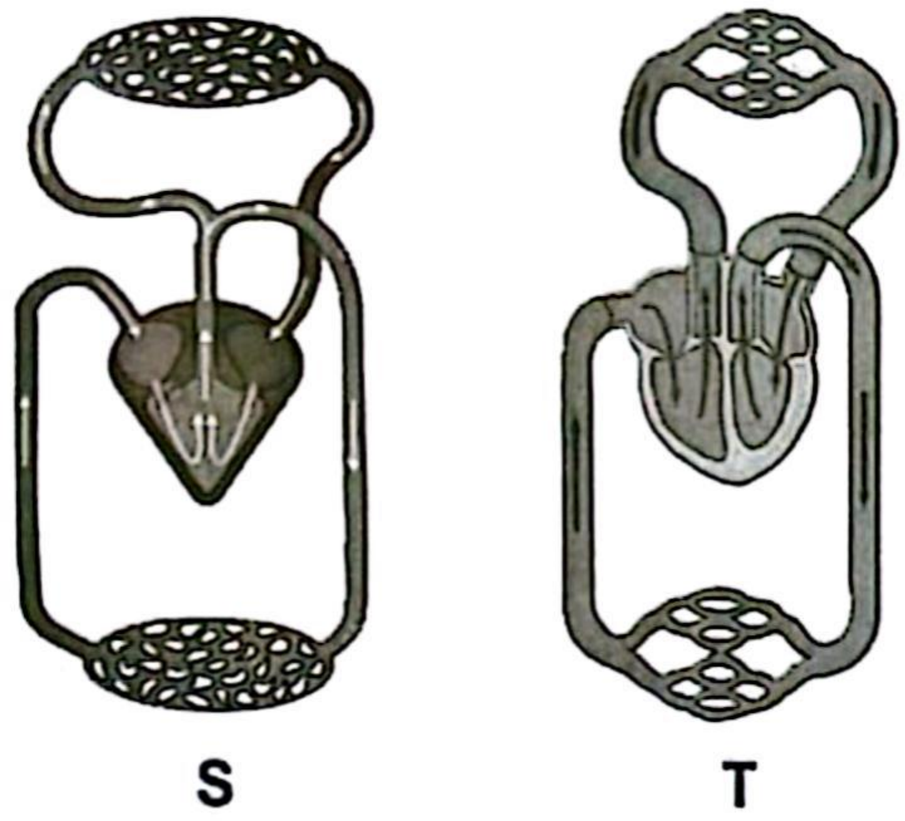
Apakah nilai tenaga bagi kacang merah tersebut?

What is the energy value of the red bean?

A 735 Jg^{-1} B 147 Jg^{-1}

C 48 Jg^{-1} D 35 Jg^{-1}

12. Rajah 10 menunjukkan dua jenis sistem peredaran darah dalam organisma.
Diagram 10 *shows two types of circulatory systems in organisms.*



Rajah 10 / *Diagram* 10

Antara yang berikut, fungsi manakah yang membezakan sistem peredaran darah, S dan T?
Which of the following functions distinguishes between circulatory systems S *and* T?

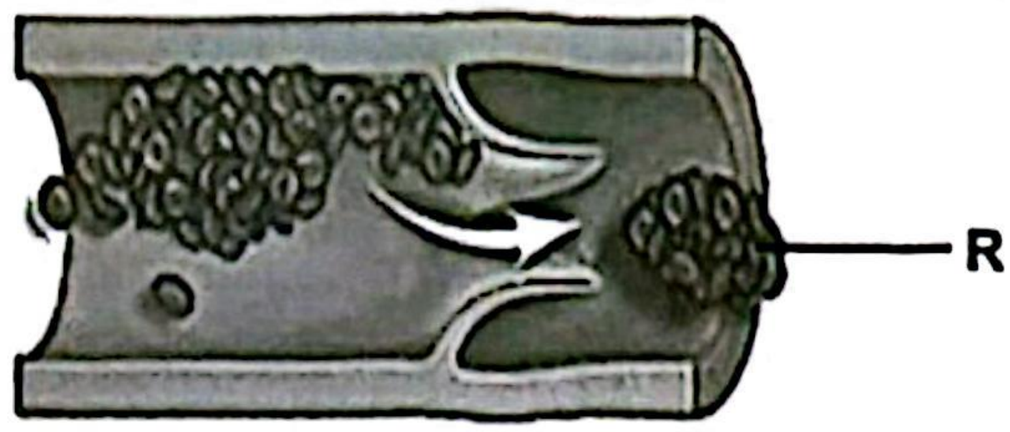
A Mengangkut darah ke seluruh badan
Transport blood throughout the body

B Mengangkut nutrien dan bahan buangan
Transport nutrients and waste products

C Darah mengalir ke dalam jantung sebanyak dua kali
Blood flows into the heart twice

D Darah beroksigen dan terdeoksigen diangkut berasingan sepenuhnya
Oxygenated and deoxygenated blood are transported completely separately

13. Rajah 11 menunjukkan masalah kesihatan yang berlaku pada salur darah manusia.
Diagram 11 *shows a health problem that occurs at the human blood vessels.*



Rajah 11 / *Diagram* 11

Antara yang berikut, yang manakah mungkin berlaku disebabkan oleh **R**?
Which of the following is likely to occur due to **R**?

A Penyakit keturunan akibat kekurangan faktor pembeku
A hereditary disease caused by a deficiency of clotting factors

B Aliran darah dalam salur darah terhenti
Blood flow in the blood vessels stops

C Kerosakan pada salur darah
Damage to the blood vessels

D Pengumpulan faktor pembeku dalam salur darah
Accumulation of clotting factors in the blood vessels

14. Maklumat berikut adalah berkaitan dengan barisan pertahanan badan.
The following information is related to the body's line of defense.

- Bersifat tidak spesifik
  Not specific
- Menghalang kemasukan patogen dalam badan
  Prevents the entry of pathogens into the body

Antara yang berikut, yang manakah terlibat dalam barisan pertahanan tersebut?
Which of the following is involved in that line of defense?

A Demam
Fever

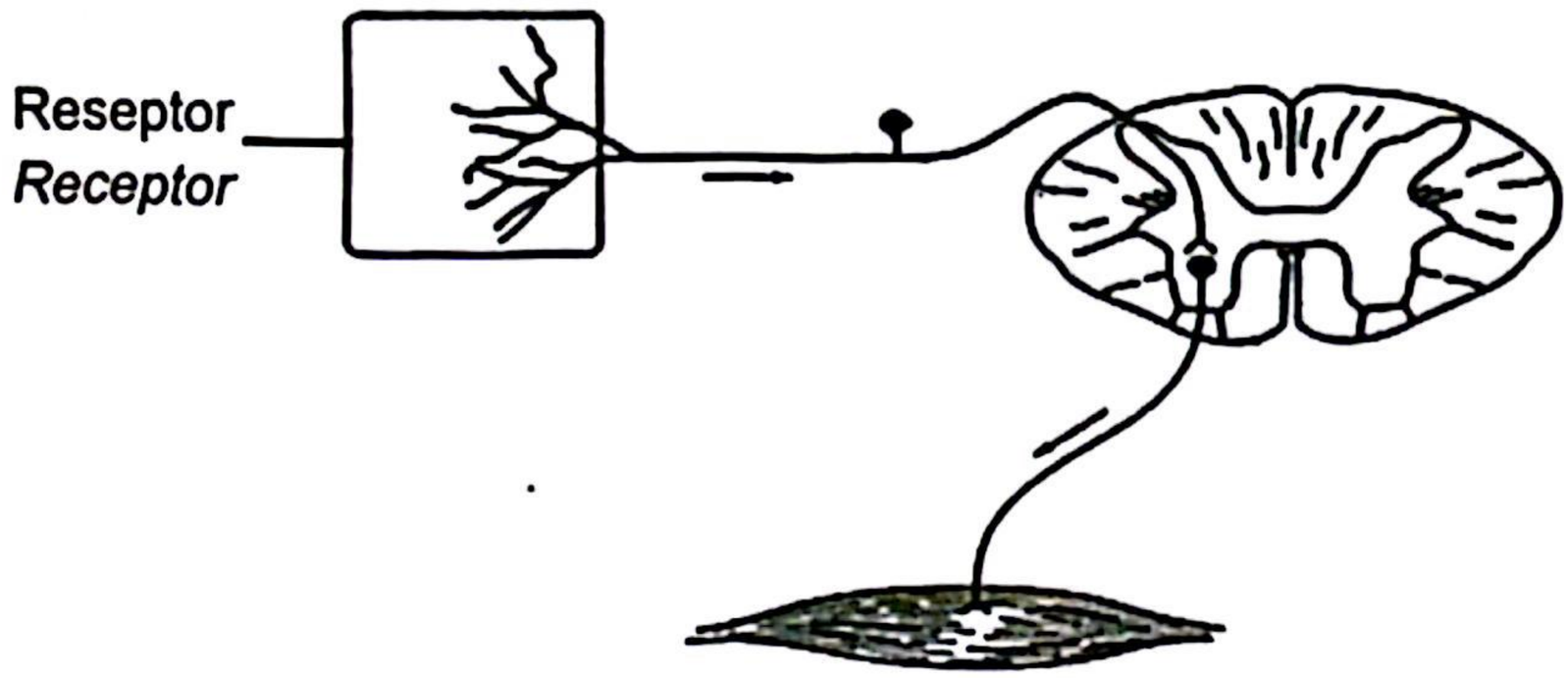
B Lisozim
Lysozyme

C Keradangan
Inflammation

D Fagositosis
Phagocytosis

15. Rajah 12 menunjukkan arka refleks bagi satu gerak balas.

Diagram 12 shows the reflex arc for a response.



Rajah 12 / *Diagram* 12

Antara yang berikut, gerak balas manakah yang melibatkan arka refleks tersebut?

Which of the following responses involves the reflex arc?

A Sentakan lutut apabila diketuk
Knee jerk when tapped

B Menarik kaki apabila terpijak paku tajam
Withdrawing the foot when stepping on a sharp nail

C Bersin akibat habuk masuk salur pernafasan
Sneezing due to dust entering the respiratory tract

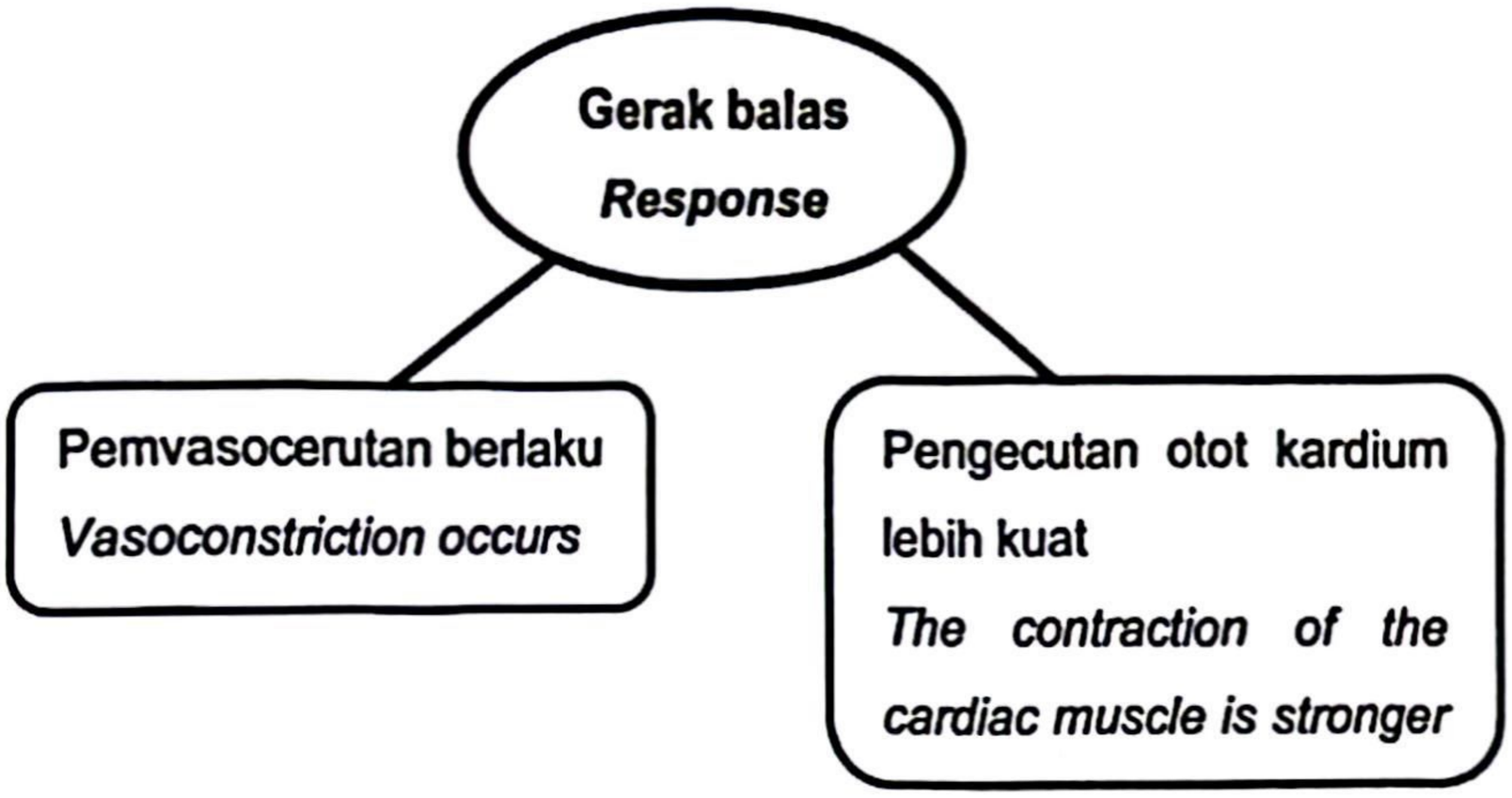
D Berkedip apabila serangga menghampiri mata dengan pantas
Blinking when an insect rapidly approaches the eye

16. Antara yang berikut, pernyataan manakah tepat menerangkan sistem saraf dengan sistem endokrin?

Which of the following statement correctly explains the nervous system and the endocrine system?

	Sistem saraf *Nervous system*	Sistem endokrin *Endocrine system*
A	Utusan dihantar dalam bentuk impuls saraf *Signal are sent in the form of nerve impulses*	Utusan dihantar dalam bentuk bahan kimia *Signal are sent in the form of chemical substances*
B	Gerak balas perlahan dan berpanjangan *Slow and prolonged response*	Gerak balas cepat dan serta merta *Fast and immediate response*
C	Tempoh kesan adalah lama *Duration of effect is long*	Tempoh kesan adalah singkat *Duration of effect is short*
D	Mengunakan aliran darah *Use the bloodstream*	Mengunakan neuron *Use neurons*

17. Rajah 13 menunjukkan infografik gerak balas pengawalaturan secara fizikal.
Diagram 13 *shows an infographic of a physical regulatory response.*



Rajah 13 / *Diagram* 13

Apakah reseptor yang terlibat untuk gerak balas tersebut?
What is receptor involved in that response?

A Osmoreseptor
Osmoreceptor

B Kemoreseptor
Chemoreceptor

C Termoreseptor
Thermoreceptor

D Baroreseptor
Baroreceptor

18. Antara yang berikut, amalan manakah yang dapat mengurangkan osteoporosis pada warga tua?

Which of the following practices can help to reduce osteoporosis in the elderly?

I Mengelakkan berkeadaan bongkok apabila berdiri atau duduk
Avoiding slouching when standing or sitting

II Sentiasa memakai kasut berkusyen dan bertumit rendah
Always wearing cushioned and low-heeled shoes

III Selalu melakukan senaman secara berkala
Engaging in exercise regularly

IV Mengamalkan tabiat minum susu serta pengambilan vitamin C dan D
Practicing the habit of drinking milk and taking vitamins C *and* D

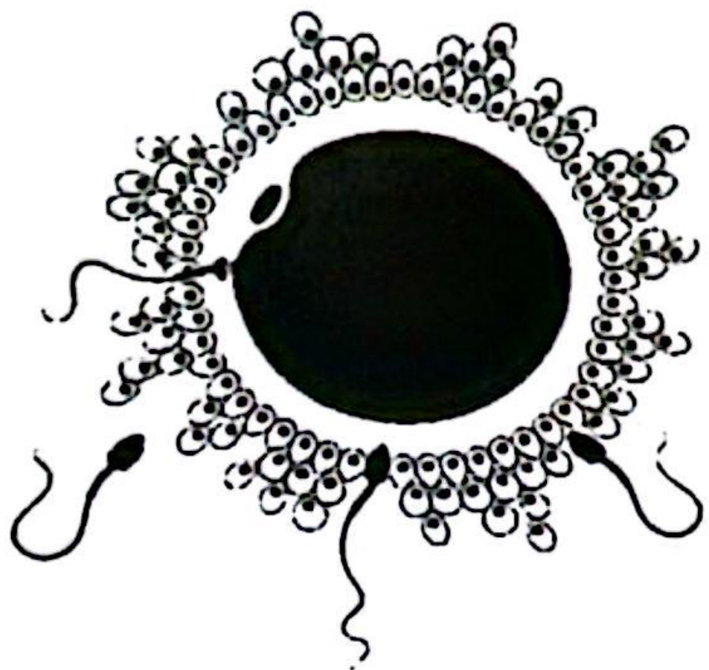
A I dan II
I *and* II

B II dan IV
II *and* IV

C I dan III
I *and* III

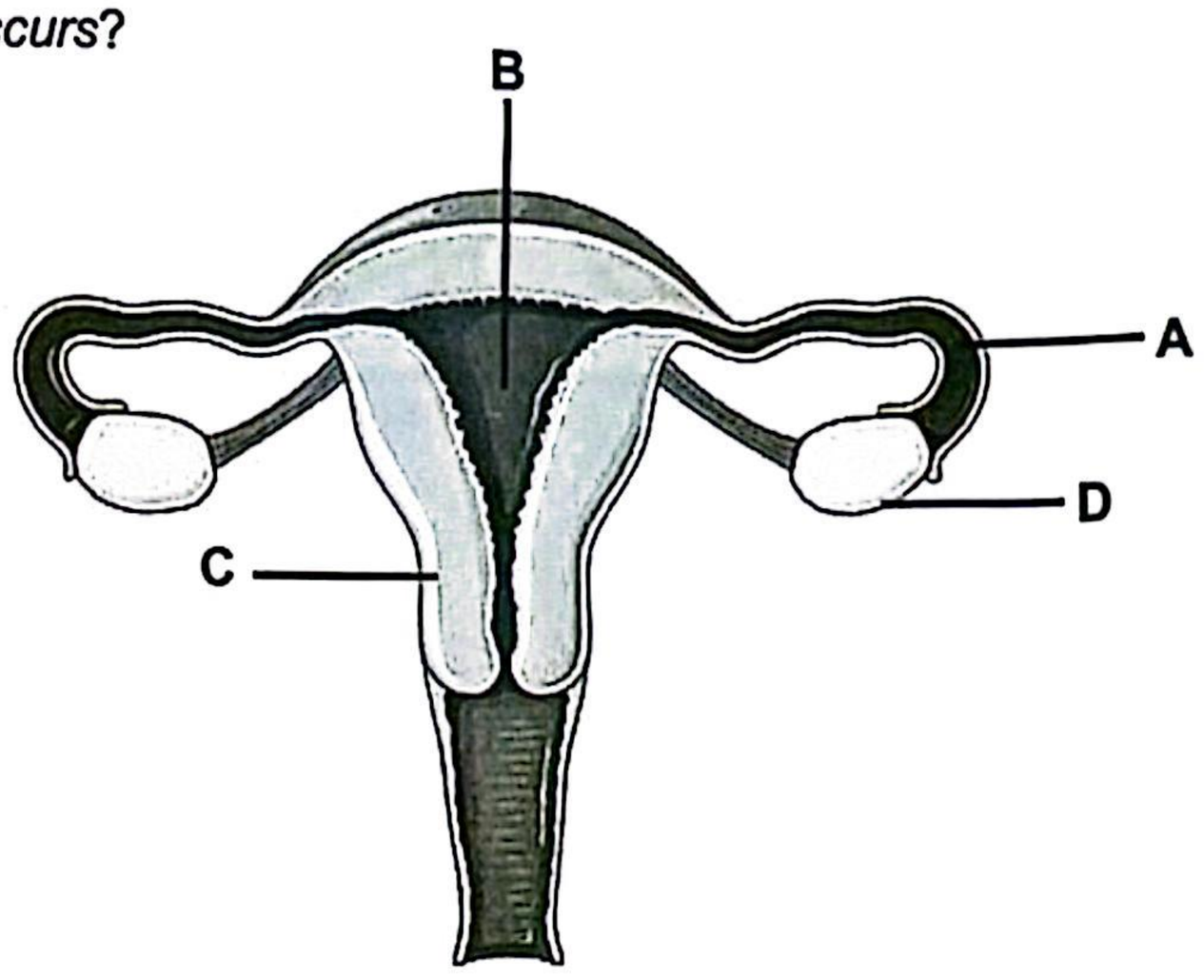
D III dan IV
III *and* IV

19. Rajah 14 menunjukkan satu proses yang berlaku dalam sistem pembiakan perempuan.
Diagram 14 *shows a process that occurs in the female reproductive system.*

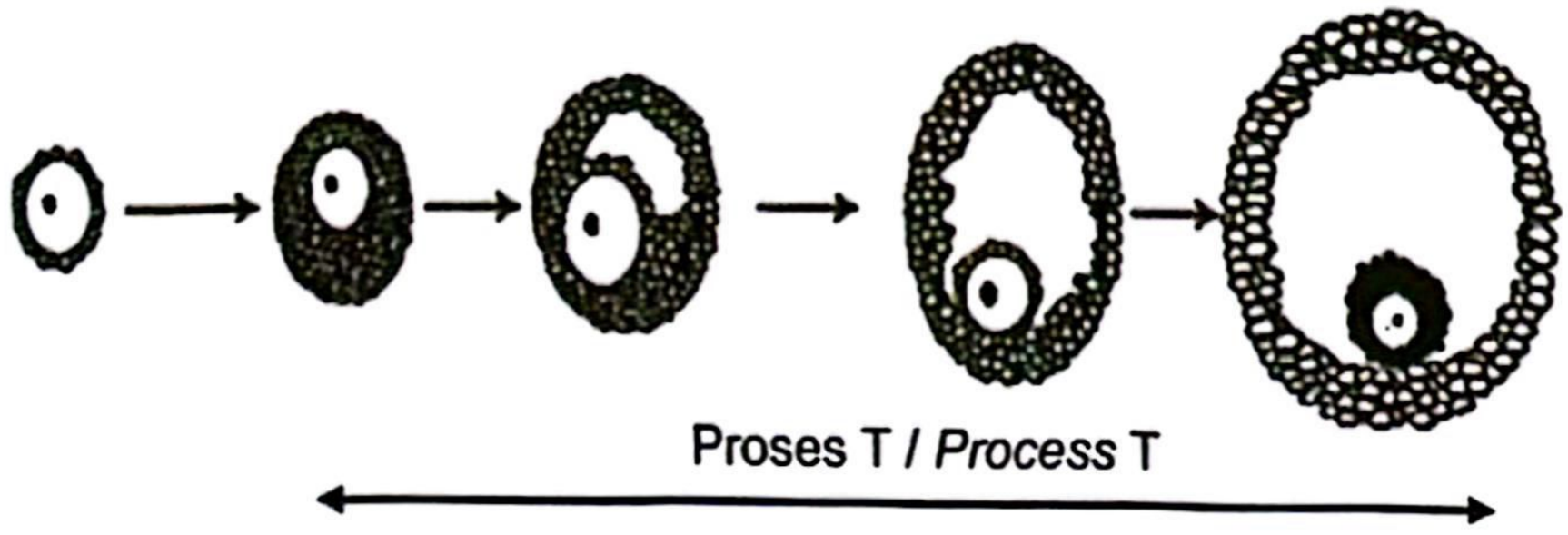


Rajah 14 / *Diagram* 14

Antara bahagian berlabel **A**, **B**, **C** dan **D** pada sistem pembiakan perempuan yang manakah tempat proses itu berlaku?
Which parts labelled **A**, **B**, **C** *or* **D** *in the female reproductive system is the location that the process occurs*?

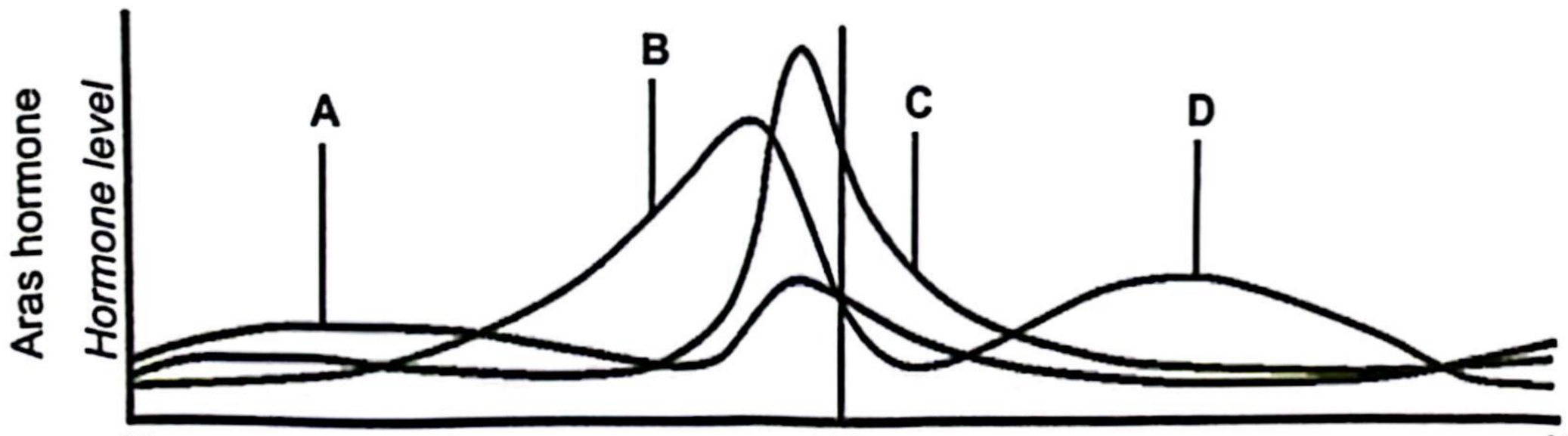


20. Rajah 15 menunjukkan satu proses yang berlaku dalam ovari.
Diagram 15 *shows a process that occurs in the ovary.*



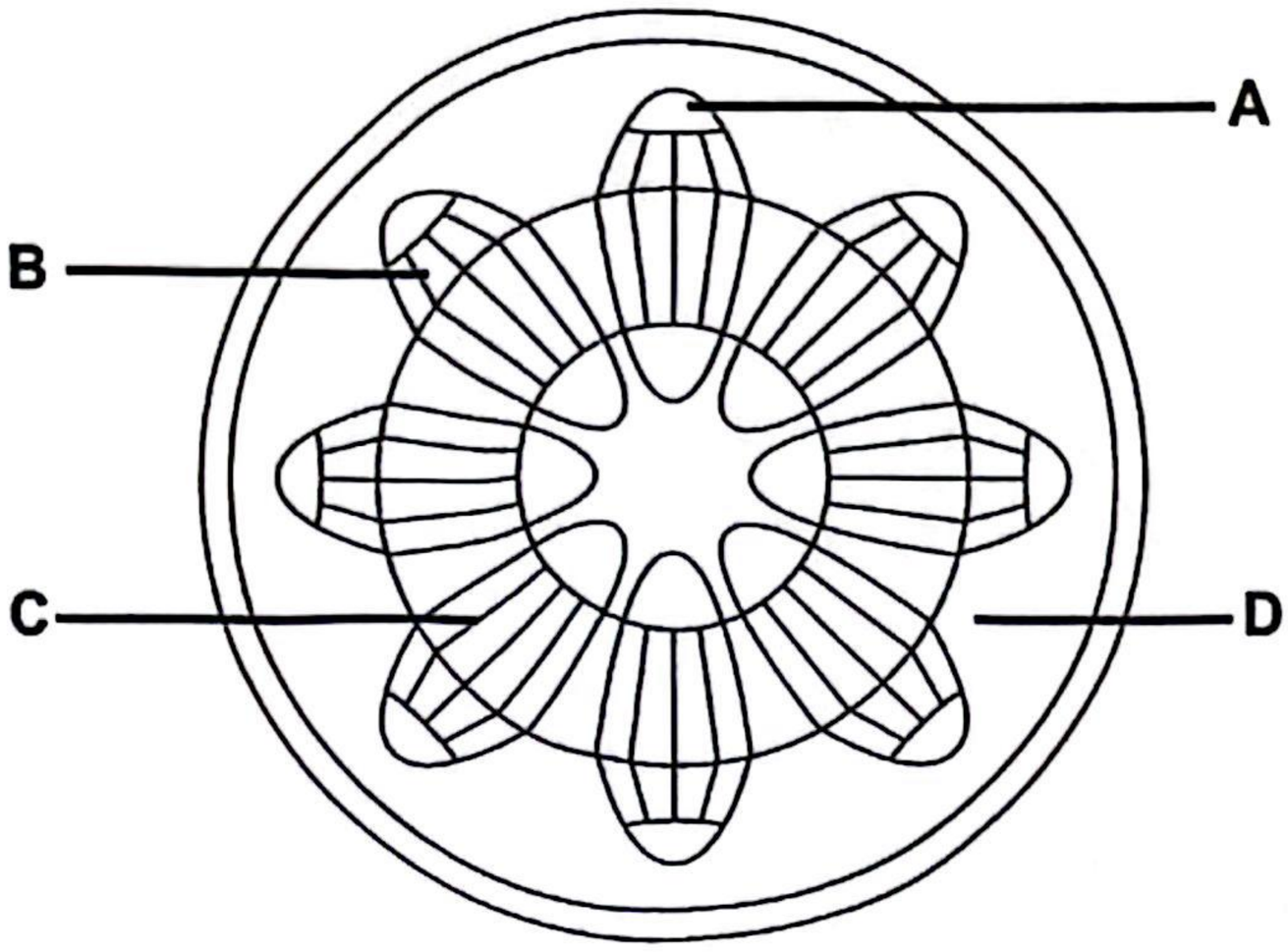
Rajah 15 / *Diagram* 15

Antara graf **A**, **B**, **C** dan **D**, hormon manakah yang dirembeskan semasa proses T?
Which graphs **A, B, C** *or* **D** *is hormone secreted during the process* T?



21. Rajah 16 menunjukkan keratan rentas batang bagi satu tumbuhan.

Diagram 16 *shows the cross section of stem in a plant.*



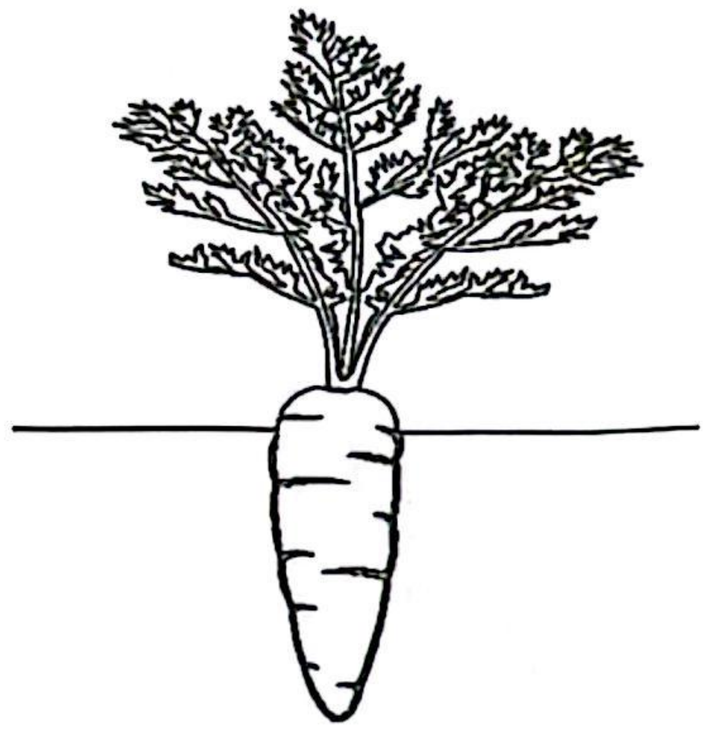
Rajah 16 / *Diagram* 16

Antara **A, B, C** dan **D**, yang manakah dibina daripada sel-sel mati?

Which of the following **A, B, C** *or* **D** *is made up of dead cells*?

22. Rajah 17 menunjukkan sejenis tumbuhan.

Diagram 17 *shows a type of plant.*

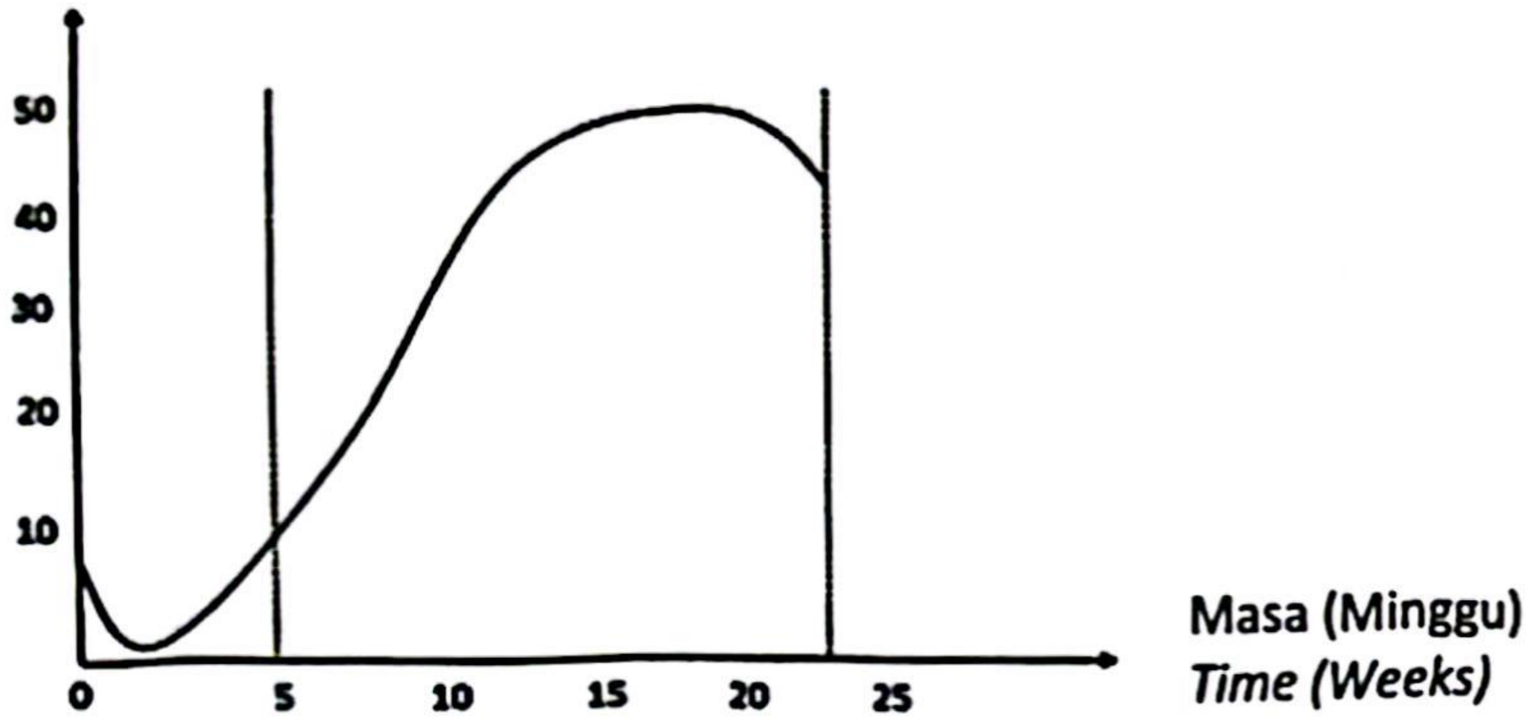


Rajah 17 / *Diagram* 17

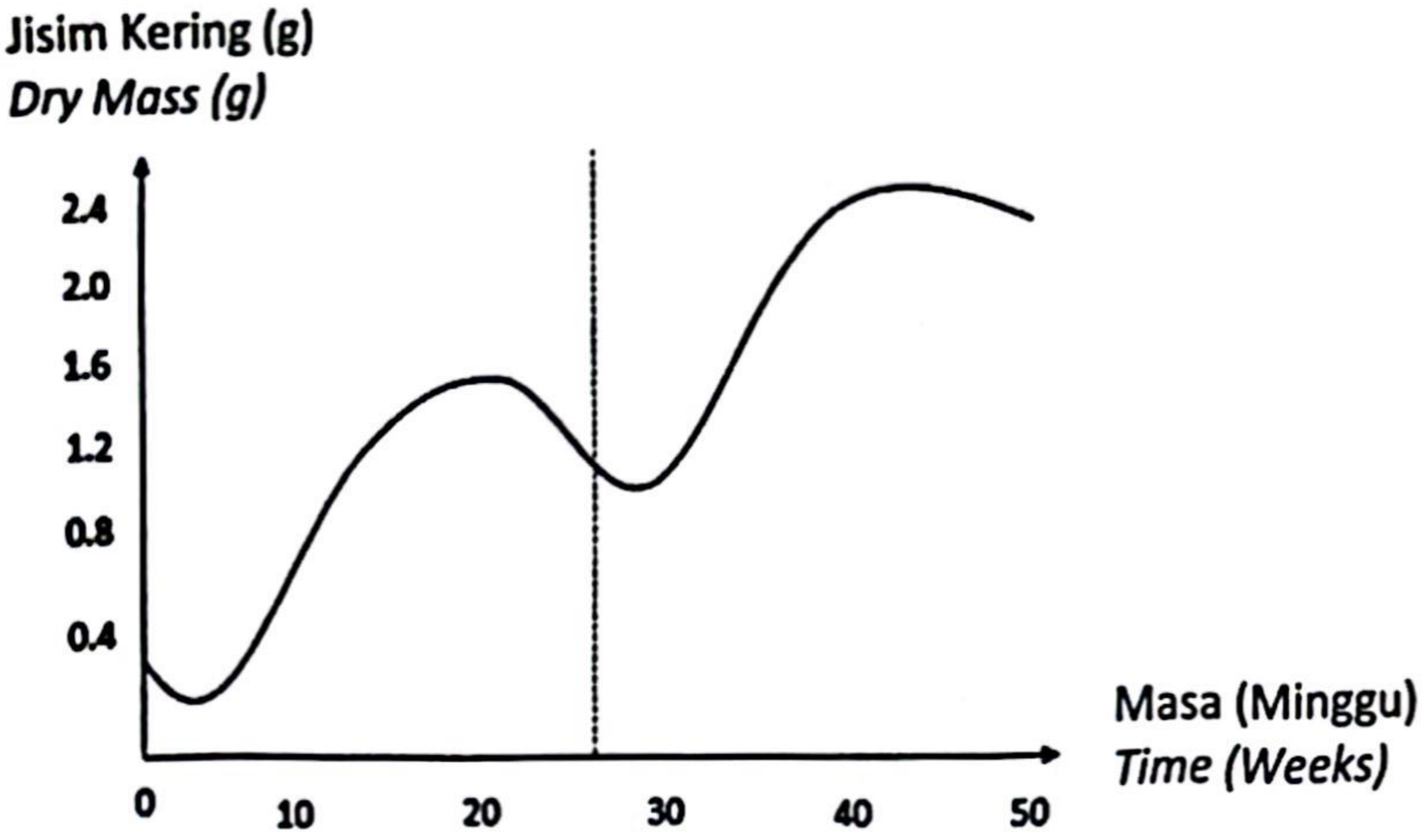
Antara yang berikut, graf manakah yang mewakili lengkung pertumbuhan pokok itu?

Which of the following graphs represents the growth curve of the plant?

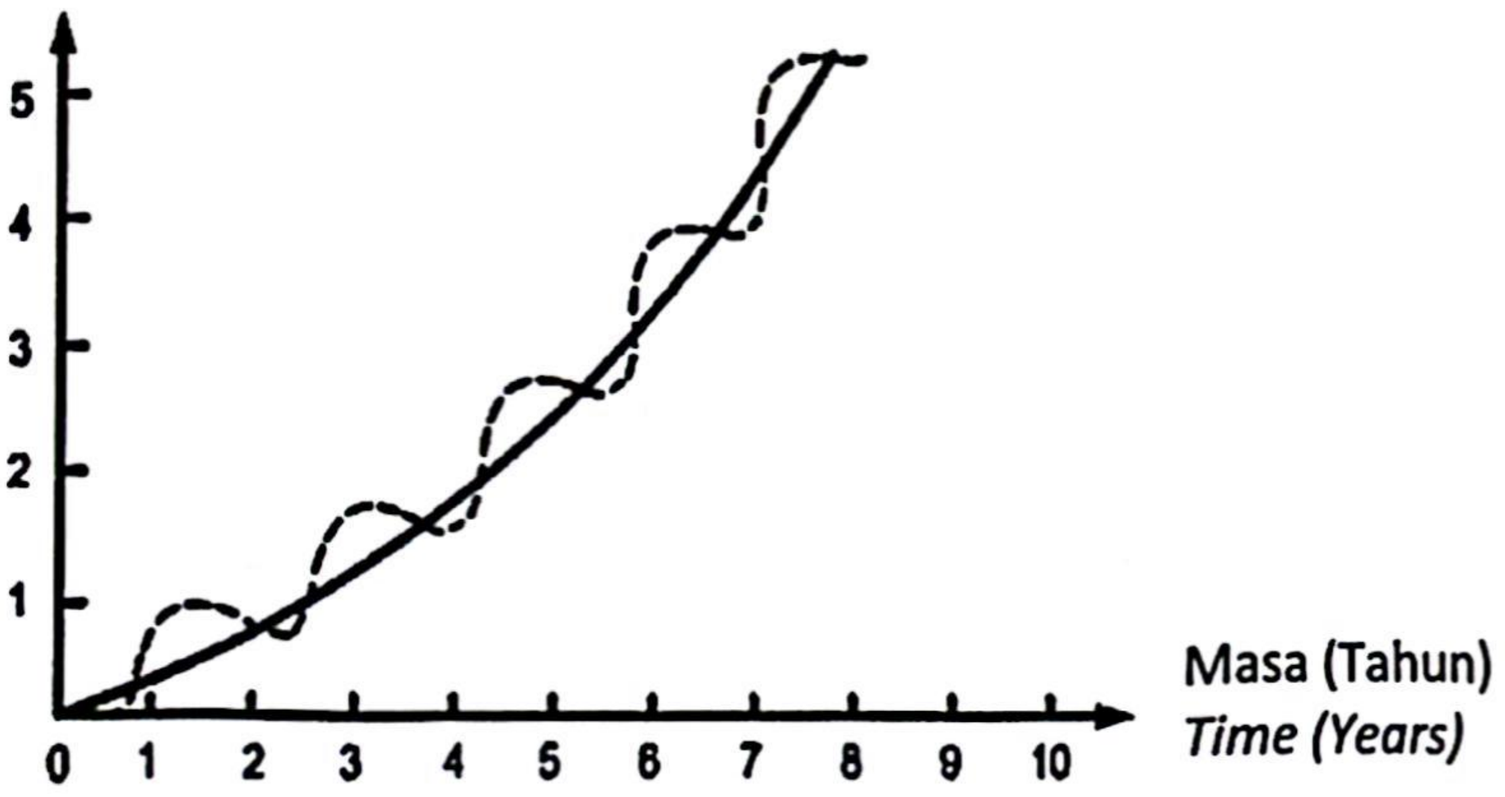
A


Jisim Kering (g)
Dry Mass (g)
50
40
30
20
10
0
5
10
15
20
25
Masa (Minggu)
Time (Weeks)

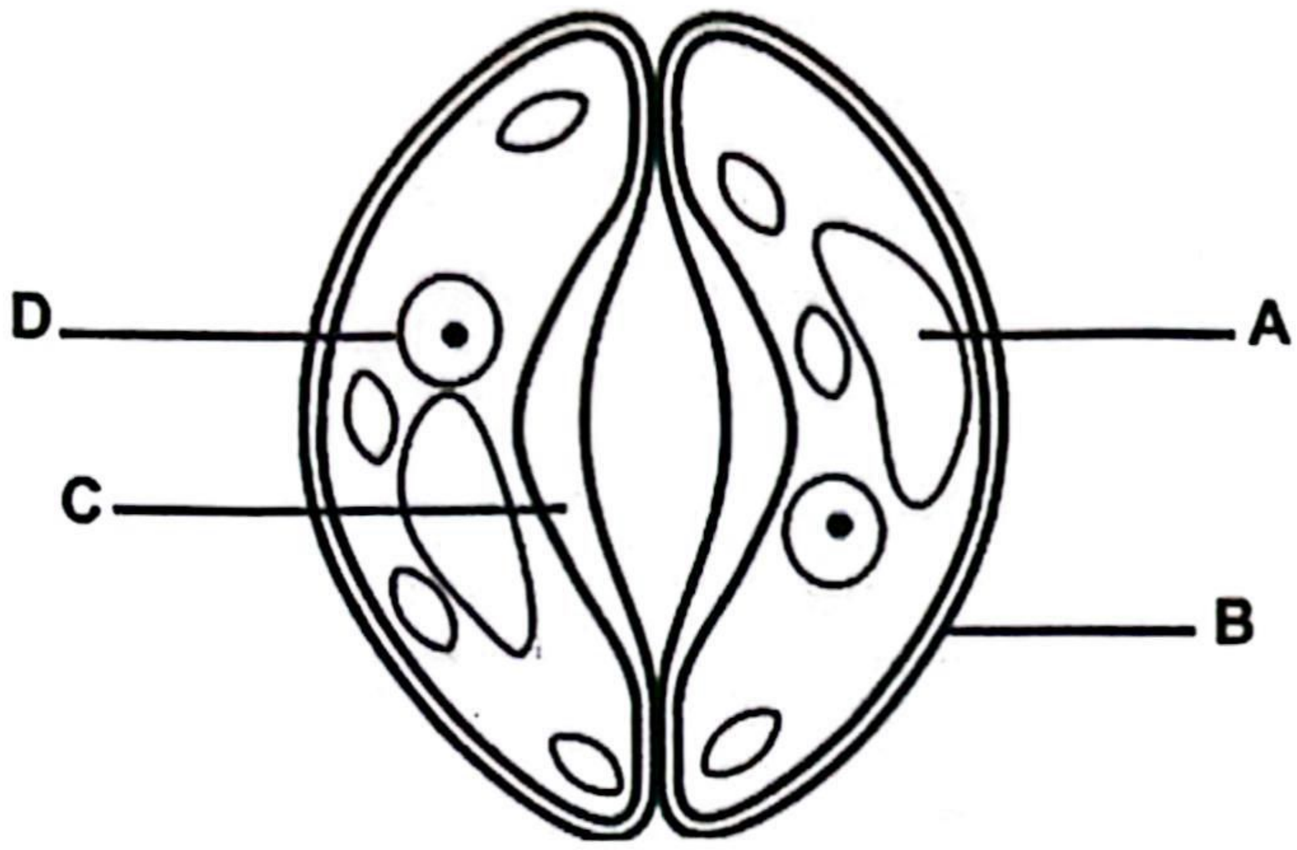
B


Jisim Kering (g)
Dry Mass (g)
2.4
2.0
1.6
1.2
0.8
0.4
0
10
20
30
40
50
Masa (Minggu)
Time (Weeks)

C


Ketinggian (m)
Height (m)
5
4
3
2
1
0
1
2
3
4
5
6
7
8
9
10
Masa (Tahun)
Time (Years)

23. Rajah 18 menunjukkan keadaan sel pengawal bagi suatu tumbuhan.
Diagram 18 *shows the condition of the guard cells of a plant.*

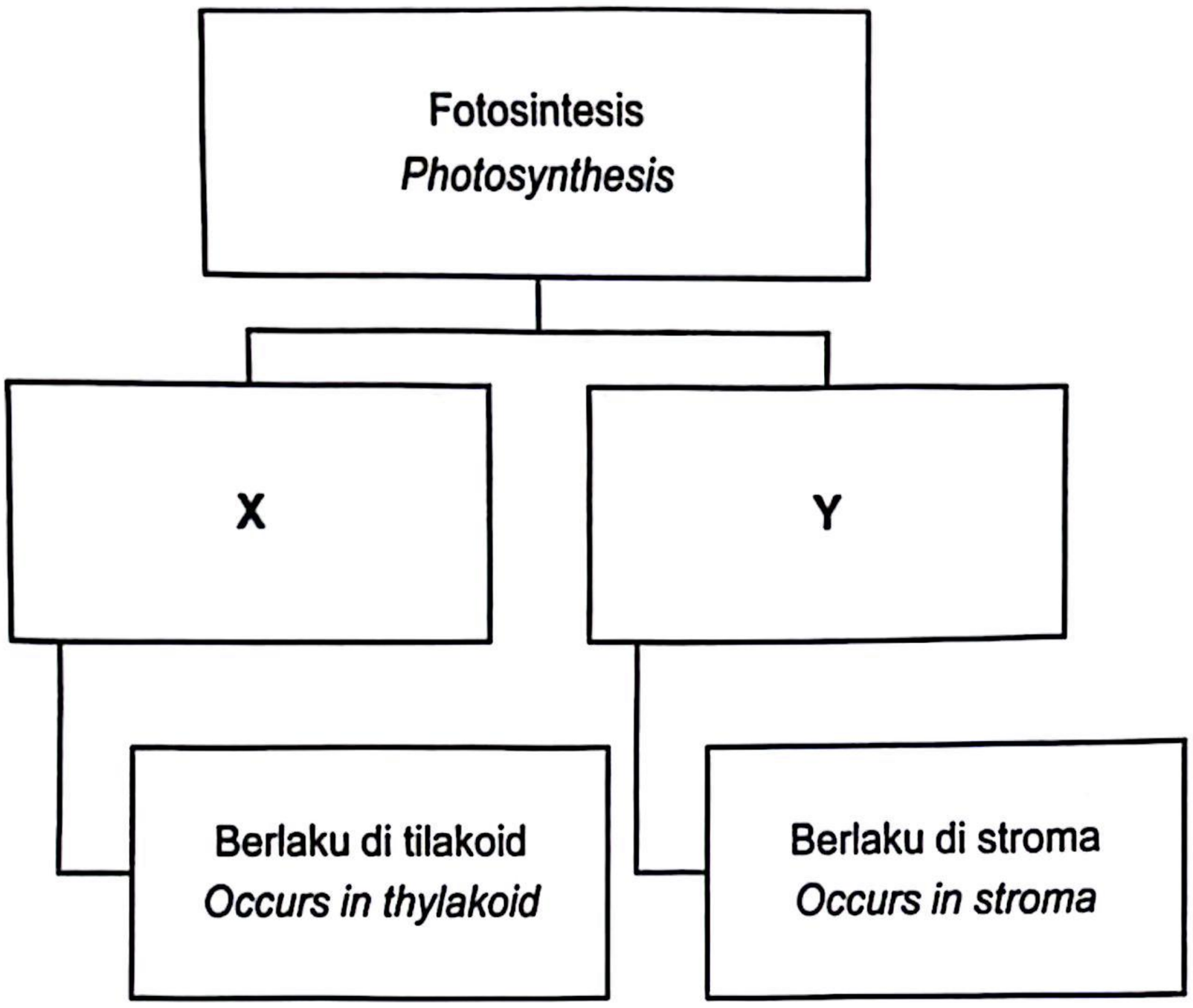


Rajah 18 / *Diagram* 18

Antara **A, B, C** dan **D**, bahagian manakah yang menyebabkan sel itu melengkung keluar?
Which of the following parts **A, B, C** *or* **D** *causes the cell to curve outward*?

24. Rajah 19 menunjukkan infografik dua peringkat tindak balas yang berlaku semasa fotosintesis.

Diagram 19 *shows an infographic of two stages of reactions that occur during photosynthesis.*



Rajah 19 / *Diagram* 19

Antara yang berikut, padanan manakah yang menerangkan tentang **X** dan **Y**?

Which of the following pairs describes **X** *and* **Y**?

	X	**Y**
A	Melibatkan penurunan karbon dioksida *Involves the reduction of carbon dioxide*	Melibatkan fotolisis air *Involves photolysis of water*
B	Menghasilkan glukosa *Produces glucose*	Menghasilkan gas oksigen dan air *Produces oxygen gases and water*
C	Menghasilkan molekul ATP *Produce* ATP *molecules*	Menggunakan molekul ATP *Using* ATP *molecules*
D	Bahan tindak balas adalah gas karbon dioksida *The reactant is carbon dioxide gas*	Bahan tindak balas ialah molekul air *The reactant is water molecule*

25. Kangkung ialah sejenis tumbuhan yang digunakan sebagai fitoremediasi dalam kehidupan.
Water spinach is a type of plant used for phytoremediation in life.

Antara yang berikut, logam berat manakah yang dapat diserap oleh tumbuhan tersebut mengikut lokasinya?
Which of the following heavy metals can be absorbed by the plant according to its location?

	Di dalam air *In water*	Di atas tanah *On the ground*
A	Kadmium *Cadmium*	Merkuri *Mercury*
B	Merkuri *Mercury*	Kadmium *Cadmium*
C	Kromium *Chromium*	Kadmium *Cadmium*
D	Kadmium *Cadmium*	Kromium *Chromium*

26. Antara yang berikut, pokok manakah yang menunjukkan gerak balas fotonasti?
Which of the following plant shows photonasty reaction?

A Pokok semalu
Mimosa plant

B Pokok petai belalang
River tamarind plant

C Pokok bunga tulip
Tulips plant

D Pokok bunga ros jepun
Japanese roses plant

27. Pernyataan berikut adalah tentang kegunaan suatu fitohormon.
The following statement is about the usage of a phytohormone.

> Hormon R digunakan dalam industri penghasilan buah untuk menghasilkan buah-buahan tanpa biji.
> *Hormon* R *is used in the fruit production industry to produce seedless fruits.*

Apakah fungsi lain bagi hormon R?
What is another function of hormone R?

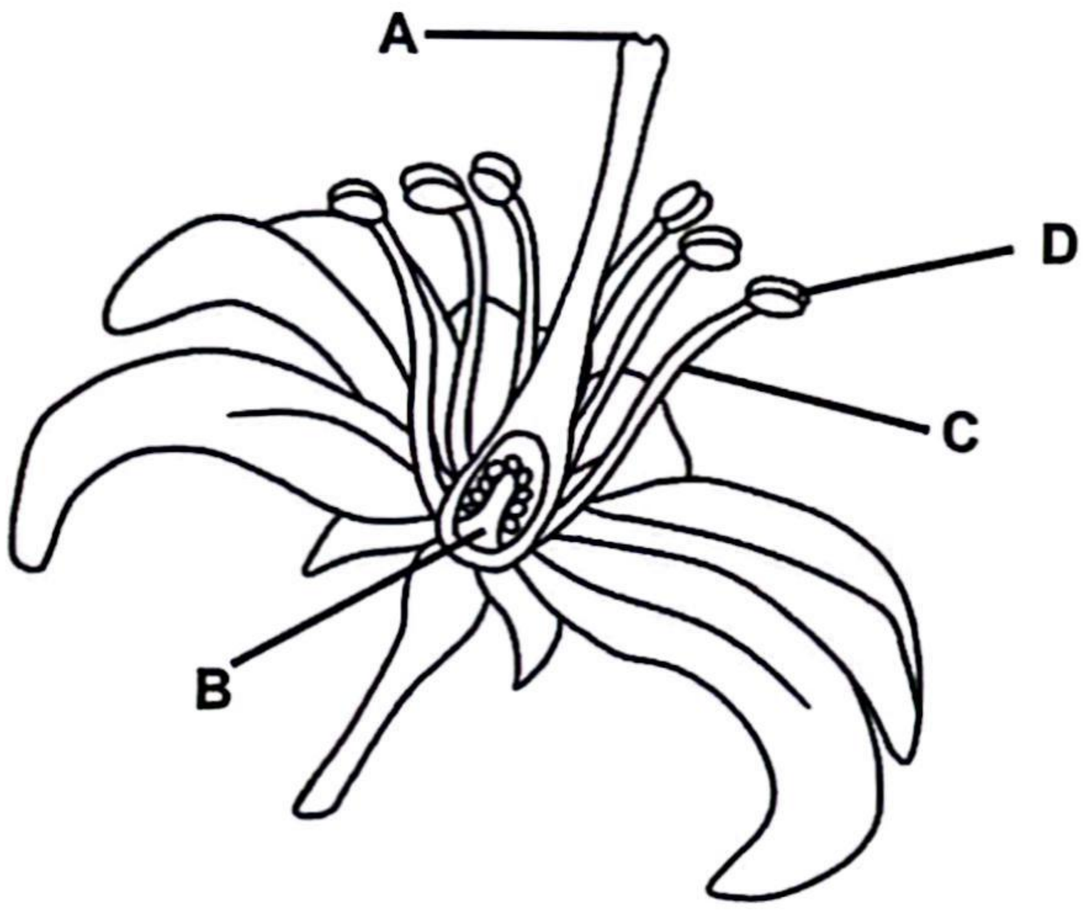
A Merencat pengeluaran tunas sisi
Inhibits growth of lateral buds

B Merencat pertumbuhan tumbuhan
Inhibits growth of plants

C Merangsang percambahan biji benih
Stimulates seed germination

D *Menggalakkan penutupan liang stoma pada musim kemarau*
Induces stomatal closing during drought season

28. Rajah 20 menunjukkan keratan memanjang sekuntum bunga
Diagram 20 *shows longitudinal section of a flower.*

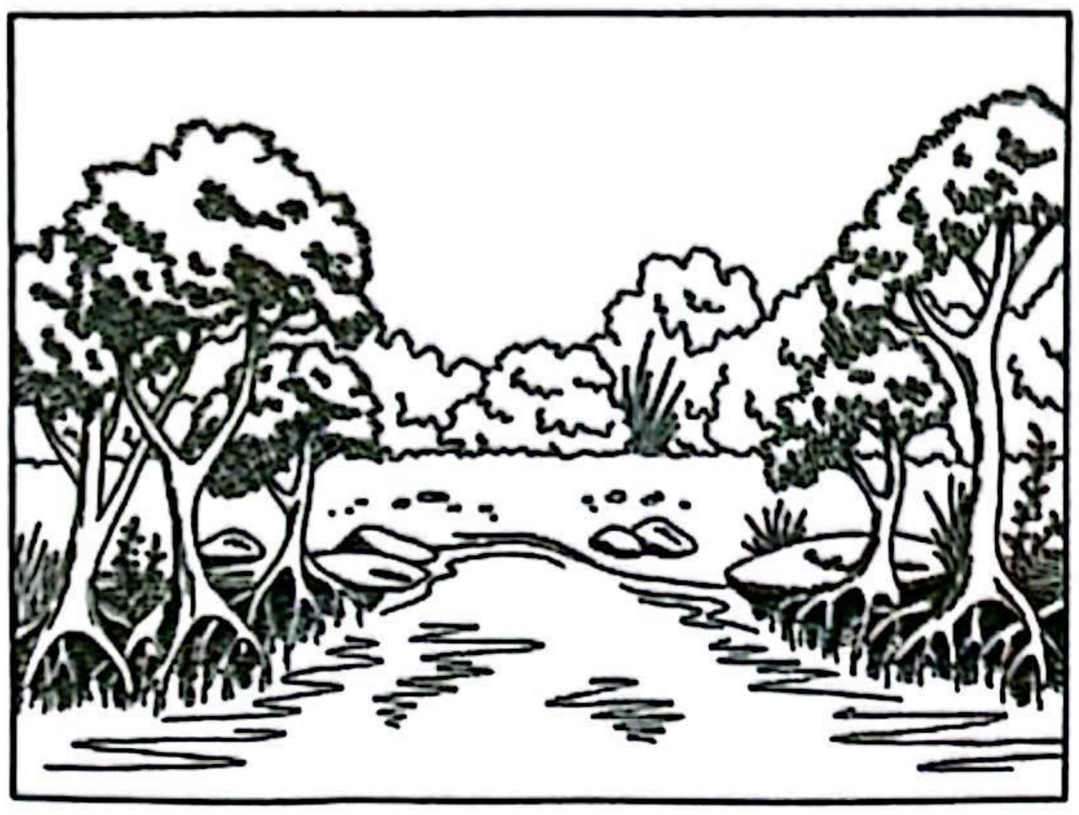


Rajah 20 / *Diagram* 20

Antara struktur **A, B, C** dan **D** pada bunga, yang manakah mengandungi sel induk mikrospora?
Which structure **A, B, C** *or* **D** *on flower contains the microspore mother cell*?

29. Rajah 21 menunjukkan satu ekosistem yang terdapat di muara sungai.

Diagram 21 *shows an ecosystem found at the river estuary.*



Rajah 21 / *Diagram* 21

Apakah pengelasan bagi tumbuhan yang hidup di habitat tersebut?

What is the classification of the plants that live in the habitat?

A Mesofit
Mesophyte

B Hidrofit
Hydrophyte

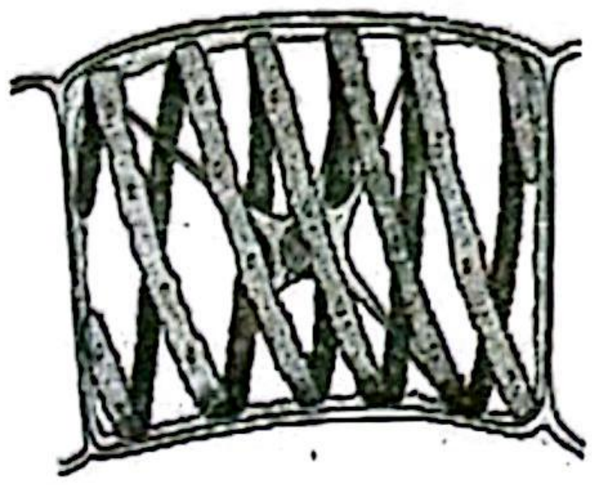
C Xerofit
Xerophyte

D Halofit
Halophyte

30. Antara yang berikut, organisma manakah yang mempunyai dinding sel yang terbina daripada peptidoglikan?

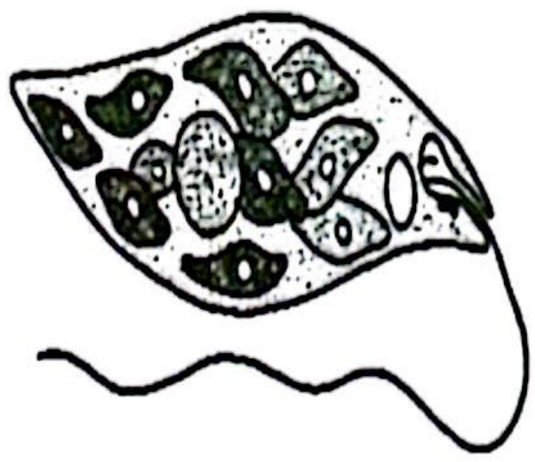
Which of the following organisms has a cell wall made of peptidoglycan?

A

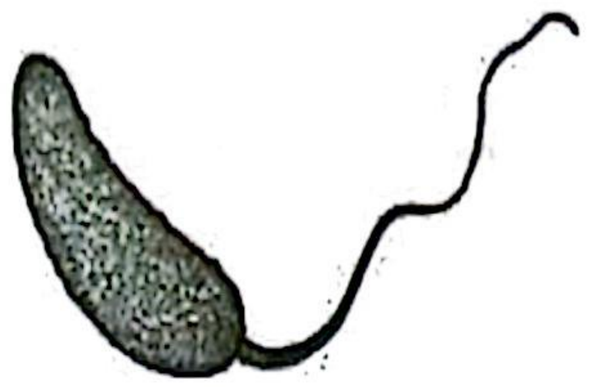


B

C

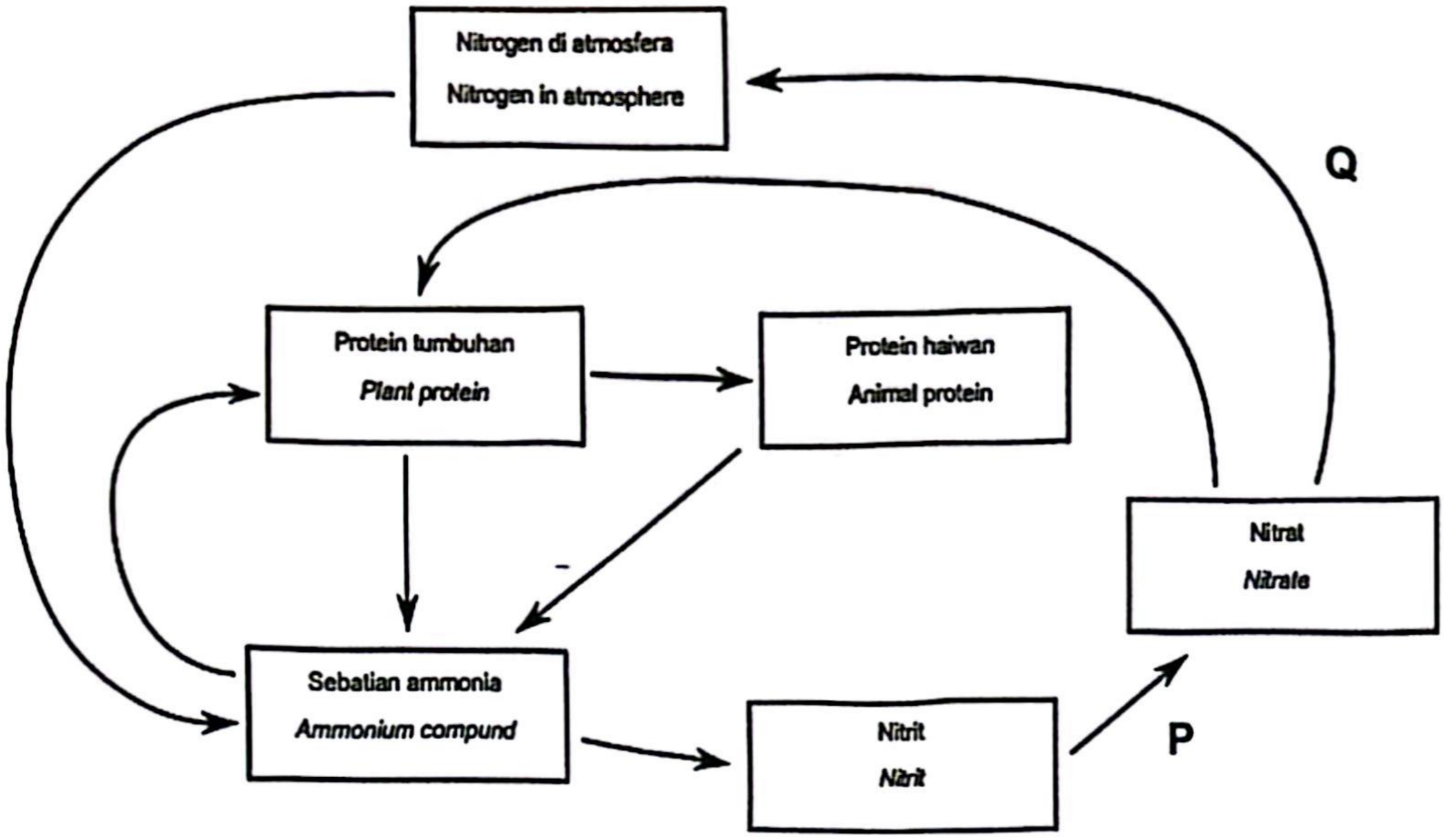


D



31. Rajah 22 menunjukkan satu kitar nitrogen yang melibatkan mikroorganisma.

Diagram 22 shows a nitrogen cycle involving microorganisms.



Rajah 22 / *Diagram 22*

Apakah mikroorganisma **P** dan **Q**?

What are microorganisms **P** *and* **Q**?

	P	Q
A	*Nitrobacter sp.* *Nitrobacter sp.*	Bakteria pendenitritan *Denitrifying bacteria*
B	Bakteria pendenitritan *Denitrifying bacteria*	*Nitrosomonas sp.* *Nitrosomonas sp.*
C	*Nitrobacter sp.* *Nitrobacter sp.*	*Nitrosomonas* sp. *Nitrosomonas sp.*
D	*Nitrosomonas sp.* *Nitrosomonas sp.*	Bakteria pendenitritan *Denitrifying bacteria*

32. Rajah 23 menunjukkan satu haiwan dengan nama saintifiknya.
Diagram 23 *shows an animal with its scientific name.*

Nama saintifik : C*anies rufus*
Scientific name : C*anies rufus*

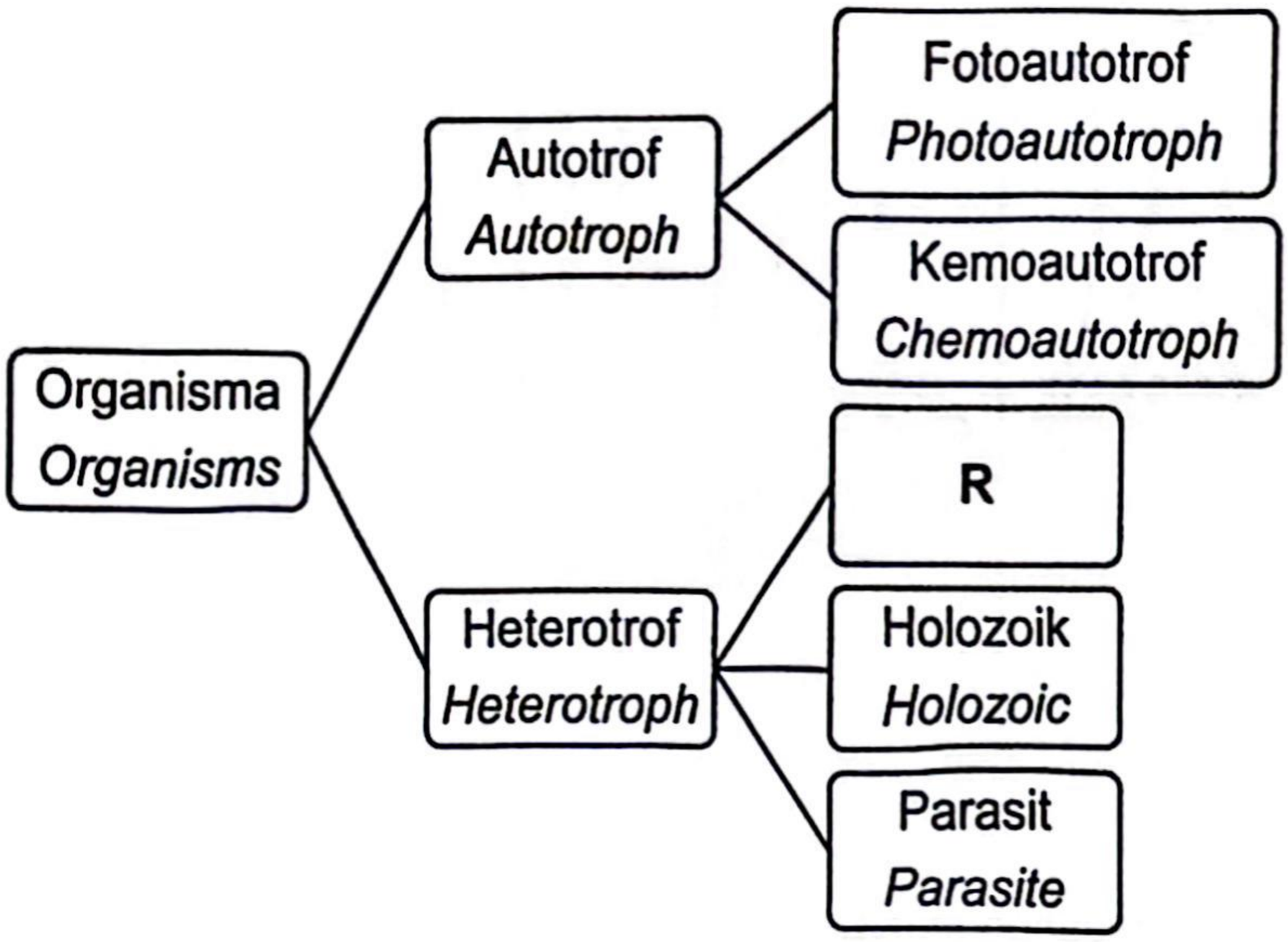
Rajah 23 / *Diagram* 23

Apakah yang diwakili oleh C*anies rufus*?
What is represented by C*anies rufus*?

	Canies	*rufus*
A	Genus *Genus*	Spesies *Species*
B	Spesies *Species*	Genus *Genus*
C	Famili *Family*	Genus *Genus*
D	Famili *Family*	Spesies *Species*

33. Rajah 24 menunjukkan pengelasan organisma berdasarkan jenis nutrisi.

Diagram 24 shows the classification of organisms based on the type of nutrition.

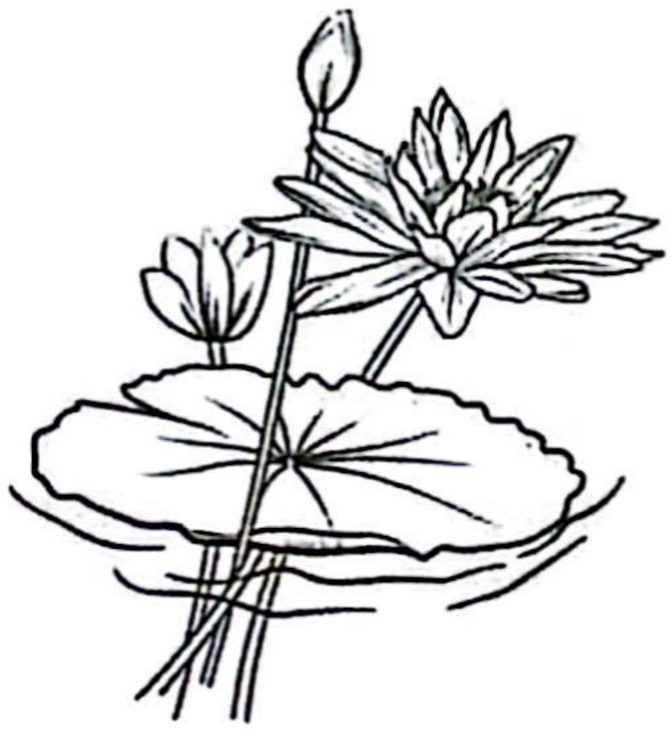


Rajah 24 / *Diagram 24*

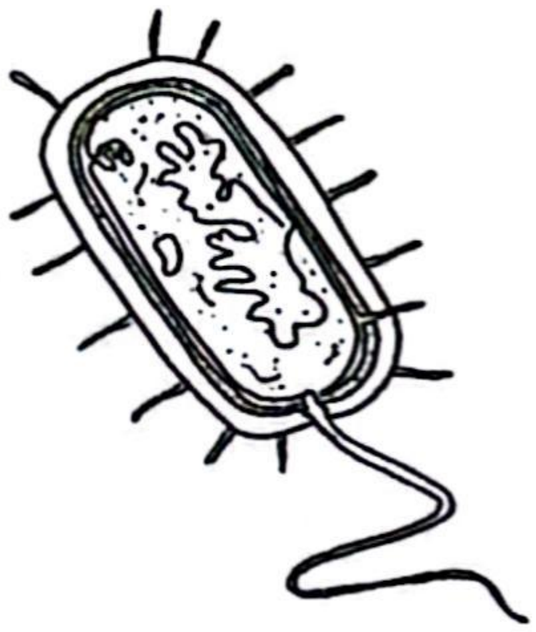
Antara yang berikut, organisma manakah yang mewakili R?

Which of the following organism represents R?

A



B

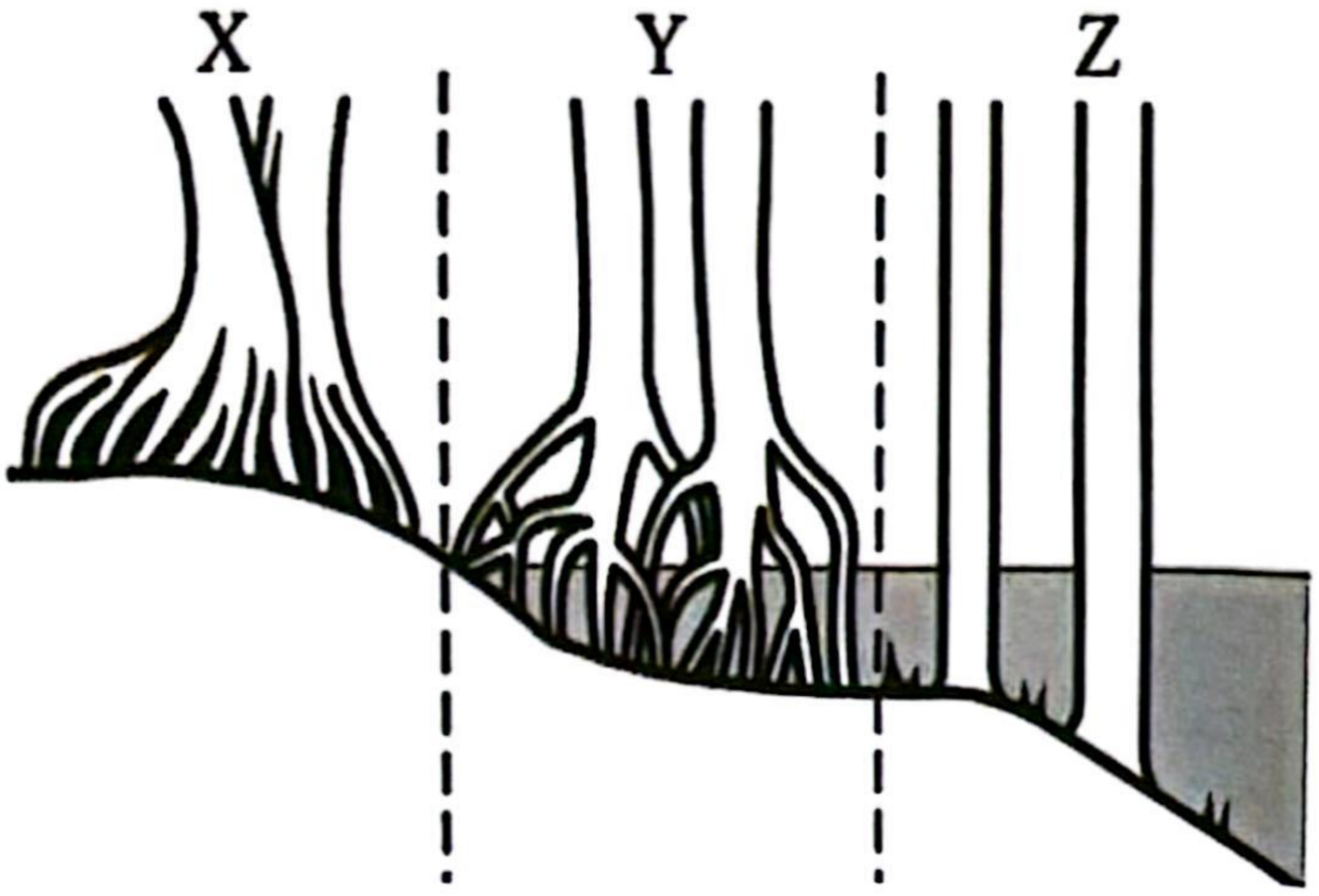


C

D

34. Rajah 25 menunjukkan pokok di kawasan paya bakau mengikut zon X, Y dan Z.

Diagram 25 shows trees in a mangrove swamp area according to zones X, Y, and Z.



Rajah 25 / *Diagram 25*

Antara yang berikut, padanan manakah yang benar tentang zon X?

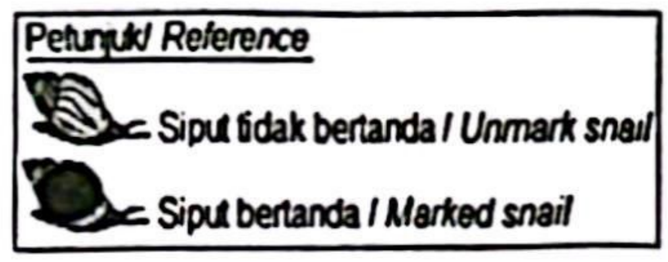
Which of the following matches is correct about zone X?

	Nama spesies pokok *Name of the tree species*	Nama spesies penyesar *Name of the successor species*
A	*Avicennia* sp. *Avicennia* sp.	*Rhizophora* sp. *Rhizophora* sp.
B	*Pandanus sp.* *Pandanus sp.*	*Avicennia* sp. *Avicennia* sp.
C	*Rhizophora* sp. *Rhizophora* sp.	*Bruguiera* sp. *Bruguiera* sp.
D	*Bruguiera* sp. *Bruguiera* sp.	*Pandanus sp.* *Pandanus sp.*

35. Jadual 1 menunjukkan keputusan eksperimen yang dilakukan untuk mengkaji saiz populasi siput di satu kawasan.

Table 1 shows the result of an experiment conducted to study the population size of snail in an area.

Bilangan siput (Tangkapan pertama) *Number of snails (First capture)*	Bilangan siput (Tangkapan kedua) *Number of snails (Second capture)*
	



Jadual 1 / *Table* 1

Kira saiz populasi siput tersebut?

Calculate the population size of the snails?

A 12

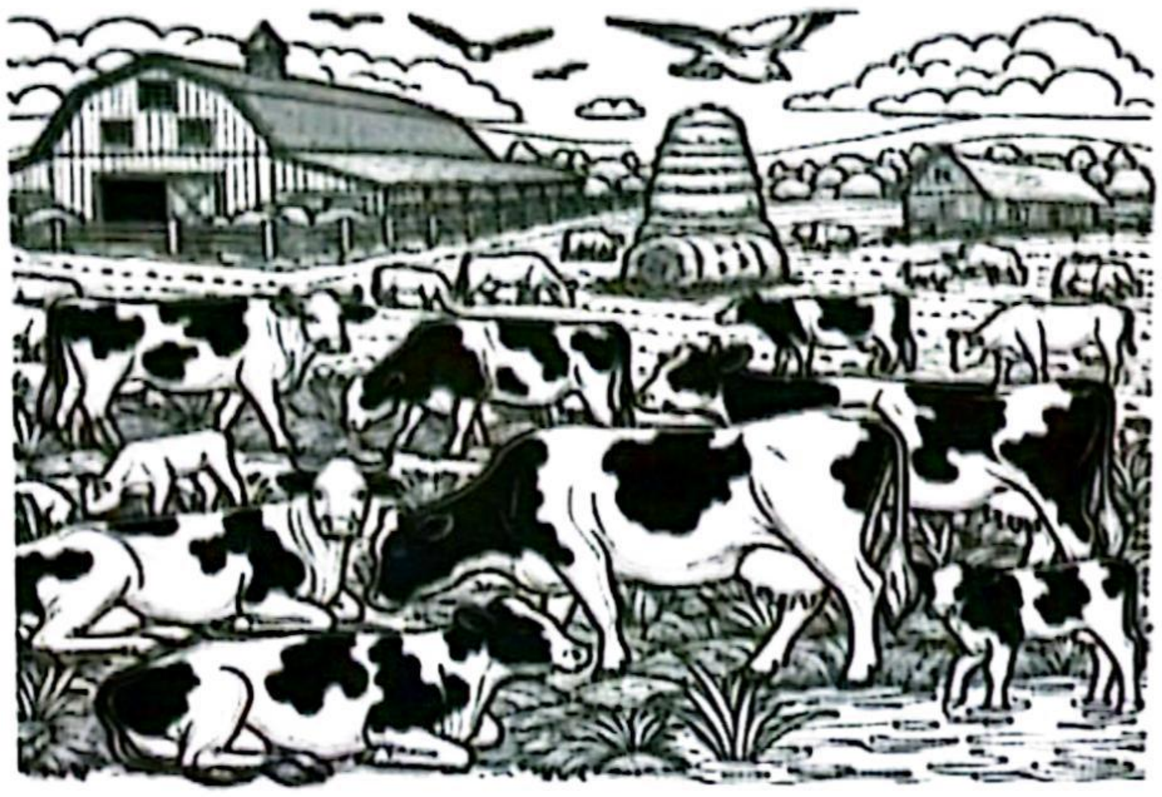
B 28

C 112

D 139

36. Rajah 26 menunjukkan satu aktiviti manusia yang menyumbang kepada kesan rumah hijau.

Diagram 26 *shows a human activity that contributes to the greenhouse effect.*



Rajah 26 / *Diagram* 26

Apakah gas rumah hijau yang dibebaskan daripada aktiviti tersebut?

What is the greenhouse gas released from the activity?

A Metana
Methane

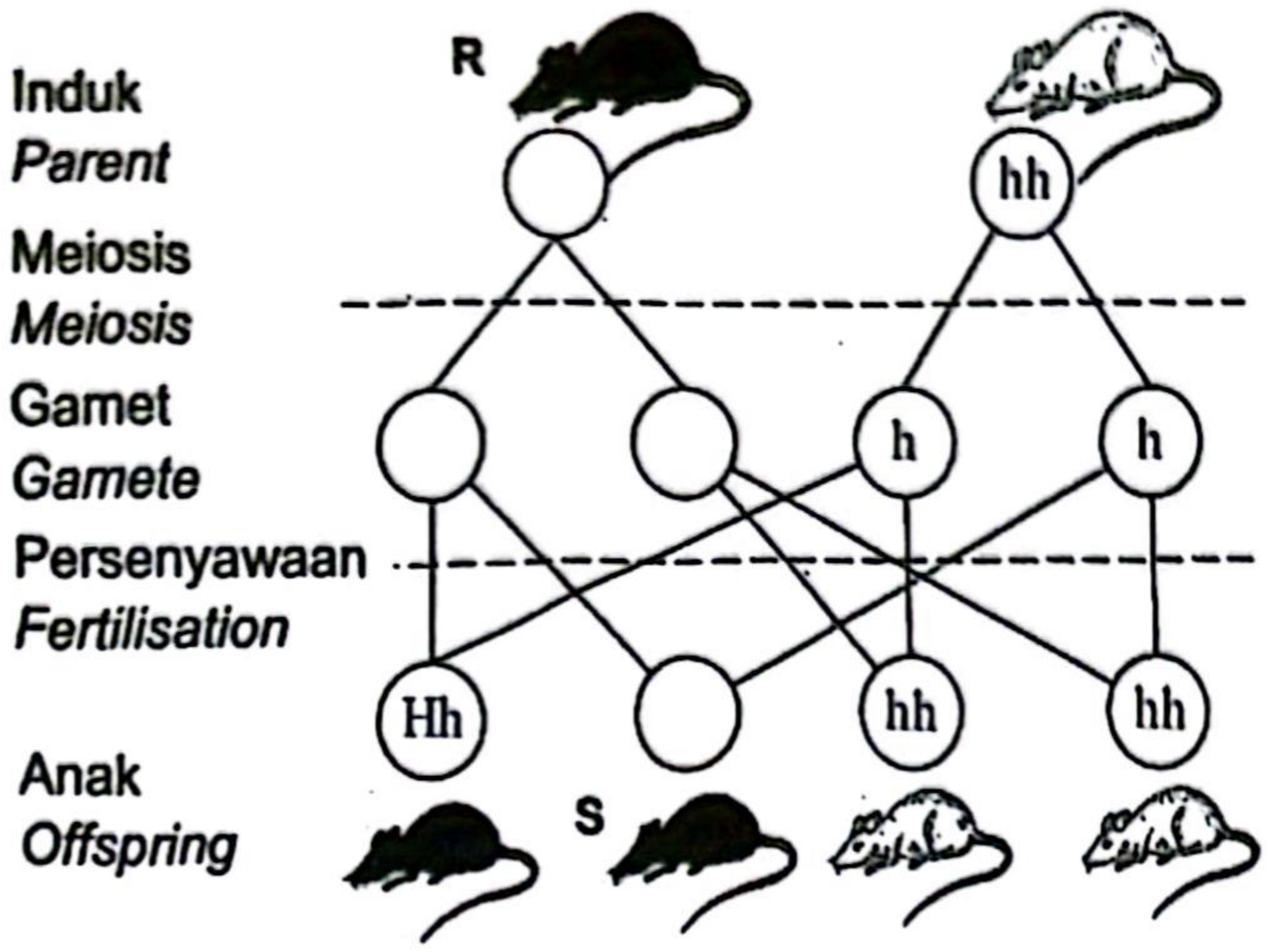
B Karbon dioksida
Carbon dioxide

C Nitrogen dioksida
Nitrogen dioxide

D Klorofluorokarbon (CFC)
Chlorofluorocarbon (CFC)

37. Rajah 27 menunjukkan rajah skema bagi pewarisan warna bulu tikus.

Diagram 27 shows the schematic diagram of the inheritance of the colour of rat's fur.



Rajah 27 / *Diagram 27*

Apakah genotip bagi tikus R dan S?

What are the genotypes of mice R *and* S?

	R	S
A	HH	Hh
B	Hh	Hh
C	Hh	hh
D	HH	HH

38. Seorang lelaki buta warna berkahwin dengan perempuan pembawa buta warna. Apakah kebarangkalian bagi pasangan itu untuk mendapat anak lelaki buta warna?

A colourblind man marries a woman who is a carrier of colour-blindness.

What is the probability that the couple will have a colourblind son?

A 0.25

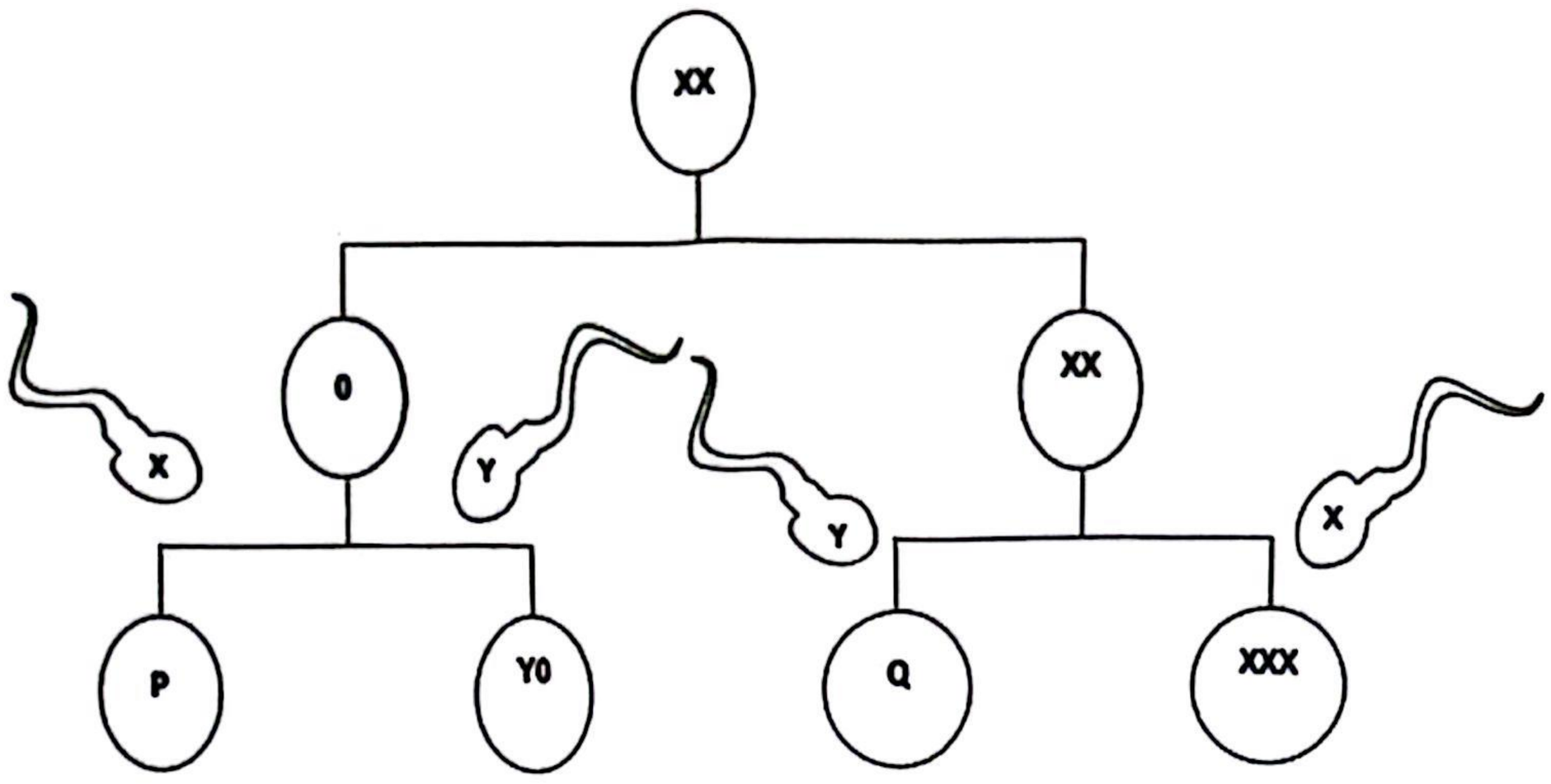
B 0.50

C 0.75

D 1.00

39. Rajah 28 menunjukkan persenyawaan secara rawak yang mungkin berlaku antara sperma normal dan ovum abnormal.

Diagram 28 shows a random fertilization that may occur between a normal sperm and an abnormal ovum.



Rajah 28 / *Diagram* 28

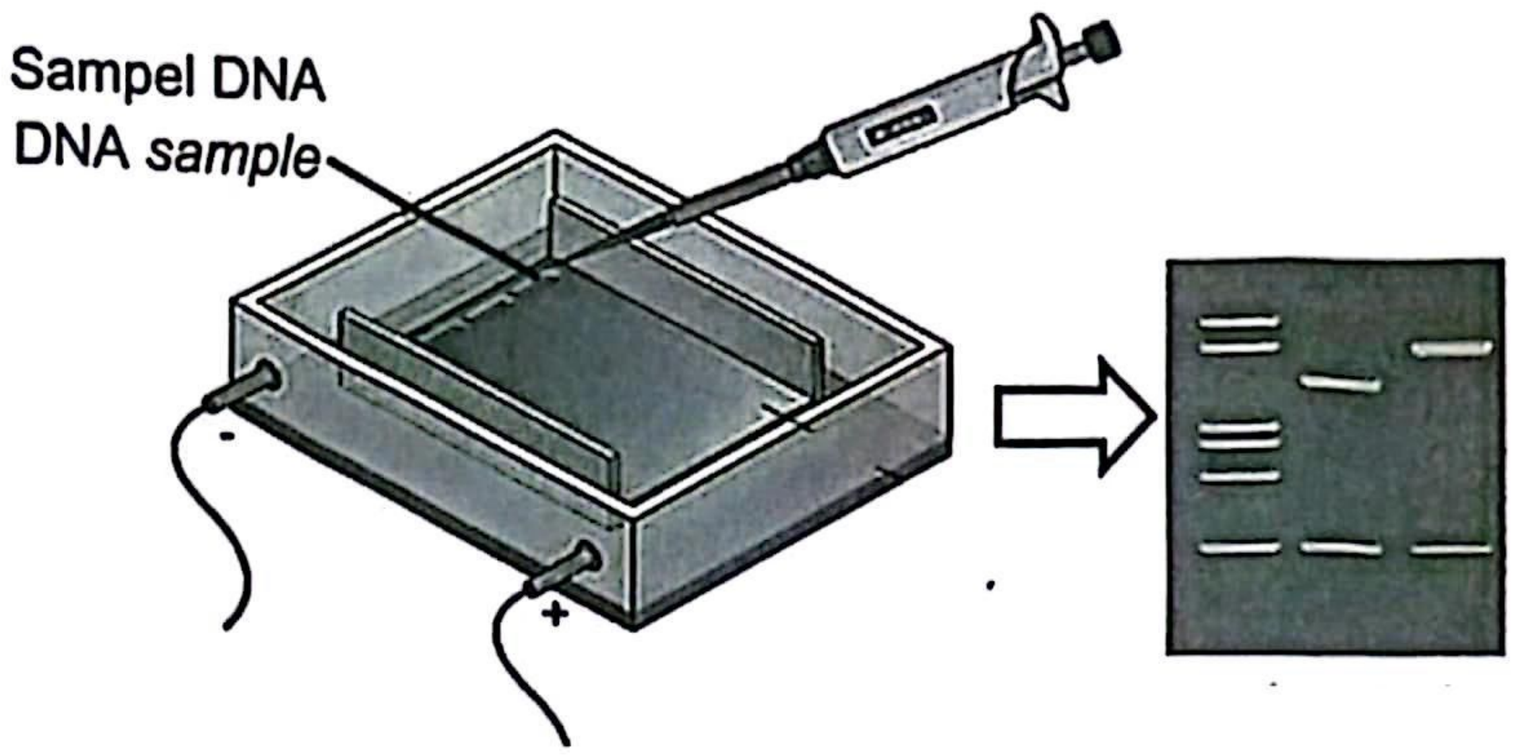
Apakah sindrom, P dan Q yang disebabkan oleh persenyawaan tersebut?

What are the syndromes, P and Q, *that are caused by the fertilization*?

	P	Q
A	Sindrom Jacob *Jacob Syndrome*	Sindrom Cri du chat *Cri du chat syndrome*
B	Sindrom Klinefelter *Klinefelter Syndrome*	Sindrom Turner *Turner Syndrome*
C	Sindrom Turner *Turner Syndrome*	Sindrom Klinefelter *Klinefelter Syndrome*
D	Sindrom Cri du chat *Cri du chat syndrome*	Sindrom Jacob *Jacob Syndrome*

40. Rajah 29 menunjukkan satu aplikasi bioteknologi yang digunakan untuk menyelesaikan masalah tertentu.

Diagram 29 *shows an application of biotechnology that is used to solve a certain problem.*



Rajah 29 / *Diagram* 29

Antara yang berikut, masalah manakah yang boleh diatasi dengan menggunakan aplikasi tersebut?

Which of the following problems can be solved using the application?

A Mencegah penyakit genetik
Preventing genetic diseases

B Merawat pencemaran minyak melalui bioremediasi
Treating oil pollution through bioremediation

C Menguji keserasian penderma organ dengan penerima
Testing the compatibility of an organ donor with the recipient

D Mengurangkan penggunaan racun perosak dalam pertanian
Reducing the use of pesticides in agriculture

KERTAS TAMAT