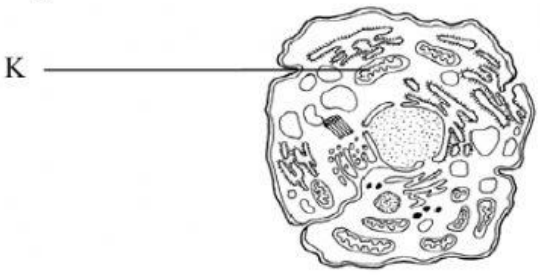
Answer **all** the questions.
Jawab semua soalan.

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



Rajah 1

What is organelle K?
Apakah organel K?

A. Nucleolus
Nukleolus
B. Ribosome
Ribosom
C. Mitochondrion
Mitokondria
D. Smooth endoplasmic reticulum
Jalinan endoplasma licin

2 Diagram 2 shows the cell organisation in a multicellular organism.
Rajah 2 menunjukkan organisasi sel dalam organisma multisel.

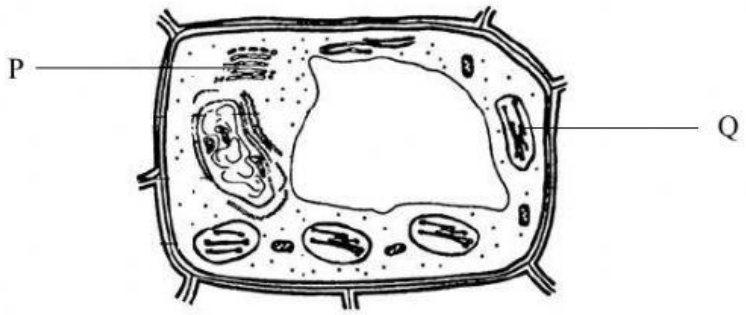
Cell	→	R	→	Organ	→	System	→	Organism
Sel				*Organ*		*Sistem*		*Organisma*

Rajah 2

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

A. Epithelial
Epitelium
B. Skin
Kulit
C. Muscle
Otot
D. Digestion system
Sistem Pencernaan

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



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

4 Which organ consists of cells which have the highest density of mitochondrion?
Organ manakah mengandungi sel-sel yang mempunyai kepadatan mitokondria paling tinggi?

A. Sentriol
Sentriol

B. Mesophil cell
Sel mesofil

C. Brain
Otak

D. Meristem cell
Sel meristem

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?

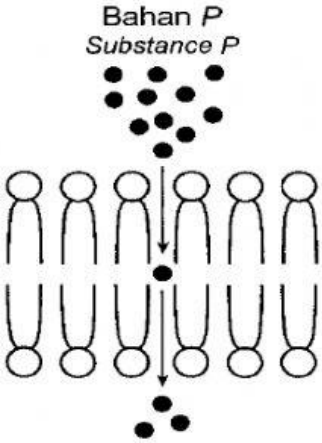
A The rate of water molecules entering the cell is lower than exiting the cell
Kadar molekul air masuk ke dalam sel adalah lebih rendah daripada keluar dari sel

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 4 shows the movement of a substance P across a plasma membrane.
Rajah 4 menunjukkan pergerakan bahan P merentasi membran plasma.



What is substance P?
Apakah bahan P?

A. Potassium ion
Ion kalium

B. Amino acid
Asid amino

C. Glucose
Glukosa

D. Karbon dioksida
Carbon dioxide

7 Red blood cells are isotonic to a 0.85% sodium chloride solution. Which of the following graphs shows the change in the volume of a red blood cell when it is put in a 0.20% salt solution?
Sel darah merah adalah isotonik kepada larutan 0.85% natrium klorida. Antara graf berikut, yang manakah menunjukkan perubahan isipadu sel darah merah apabila dimasukkan ke dalam larutan garam 0.20%.

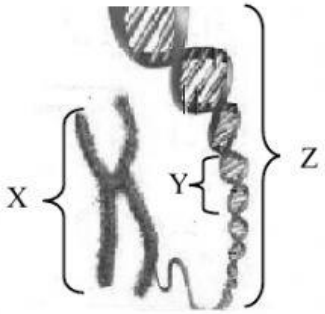
A

B

C

D

8 Diagram 5 shows the relationship between genes, DNA and chromosomes.
Rajah 5 menunjukkan hubungan antara gen, DNA dan kromosom.



What are X, Y and Z?
Apakah X, Y dan Z?

	X	Y	Z
A	DNA *DNA*	Chromosome *Kromosom*	Gene *Gen*
B	DNA *DNA*	Gene *Gen*	Chromosome *Kromosom*
C	Gene *Gen*	Chromosome *Kromosom*	DNA *DNA*
D	Chromosome *Kromosom*	Gene *Gen*	DNA *DNA*

9 What are the structures of a fat molecule?
Apakah struktur satu molekul lemak?

A. One molecule of fatty acid and two molecules of glycerol
Satu molekul asid lemak dan dua molekul gliserol
B. Two molecules of fatty acid and one molecule of glycerol
Dua molekul asid lemak dan satu molekul gliserol
C. Three molecules of fatty acid and one molecule of glycerol
Tiga molekul asid lemak dan satu molekul gliserol
D. One molecule of fatty acid and three molecules of glycerol
Satu molekul asid lemak dan tiga molekul gliserol

10 Diagram 6 shows human digestive system.
Rajah 6 menunjukkan sistem pencernaan manusia.

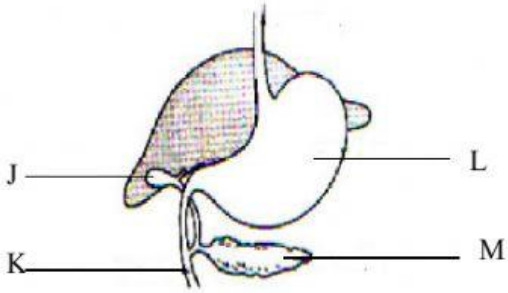


Diagram 6
Rajah 6

Which of the following is involved with starch digestion?
Yang manakah antara berikut terlibat dengan pencernaan kanji?

A. J and K
J dan K
B. L and M
L dan M
C. K and M
K dan M
D. J and L
J dan L