

Bahagian A

1. Antara kuantiti fizik dan unit SI berikut, yang manakah dipadankan dengan betul?
Which of the following physical quantities and SI unit is correctly matched?

	Kuantiti fizik Physical quantity	Unit SI SI Unit
A	Arus elektrik Electric current	Miliampere Milliampere
B	Suhu Temperature	Celsius Celsius
C	Panjang Length	Meter Metre
D	Masa Time	Jam Hour

2. Jadual 1 menunjukkan keputusan satu eksperimen untuk menentukan tempoh ayunan satu ladung.
Table 1 shows the results of an experiment to determine the period of oscillation of a pendulum.

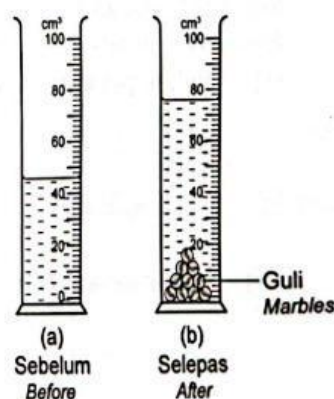
Jadual 1 / Table 1

Jisim ladung (g) Mass of pendulum (g)	4	4
Panjang ladung (cm) Length of pendulum (cm)	15	25
Tempoh ayunan (s) Period of oscillation (s)	1.8	2.2

Berdasarkan Jadual 1, yang manakah betul?
Based on Table 1, which of the following is correct?

	Pemboleh ubah dimanipulasi Manipulated variable	Pemboleh ubah bergerak balas Responding variable
A	Jisim ladung Mass of pendulum	Panjang ladung Length of pendulum
B	Panjang ladung Length of pendulum	Tempoh ayunan Period of oscillation
C	Tempoh ayunan Period of oscillation	Panjang ladung Length of pendulum
D	Panjang ladung Length of pendulum	Jisim ladung Mass of pendulum

3. Amir ingin menghitung isi padu sebiji guli. Dia menggunakan 10 biji guli yang sama saiz untuk aktiviti (a) dan (b) seperti yang ditunjukkan dalam Rajah 1. Cari purata isi padu sebiji guli dalam cm^3 .
Amir would like to find the volume of a marble. He used 10 marbles of same size to carry out activity (a) and (b) as shown in Diagram 1. Find the average volume of a marble, in cm^3 .



Rajah 1 / Diagram 1

- A 2.9 cm³ C 3.2 cm³
B 3.0 cm³ D 3.3 cm³

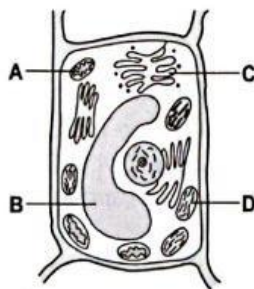
4. Antara yang berikut, yang manakah susunan organisasi sel dalam badan manusia yang betul?

Which of the following is the correct cell organisation arrangement in a human body?

- A Sel → Tisu → Sistem → Organ → Organisma
Cell → Tissue → System → Organ → Organism
B Tisu → Sel → Sistem → Organ → Organisma
Tissue → Cell → System → Organ → Organism
C Sel → Tisu → Organ → Sistem → Organisma
Cell → Tissue → Organ → System → Organism
D Tisu → Sel → Organ → Sistem → Organisma
Tissue → Cell → Organ → System → Organism

5. Rajah 2 menunjukkan struktur-struktur sel yang terdapat di dalam sel tumbuhan. Antara struktur-struktur berikut, yang manakah terlibat dalam proses fotosintesis?

Diagram 2 shows the cell structures that can be found inside plant cells. Which of the following cell structures is involved in photosynthesis?



Rajah 2 / Diagram 2

6. Rajah 3 menunjukkan dua jenis organ yang boleh didapati di dalam sistem X.
Diagram 3 shows two types of organs that can be found in system X.



Rajah 3 / Diagram 3

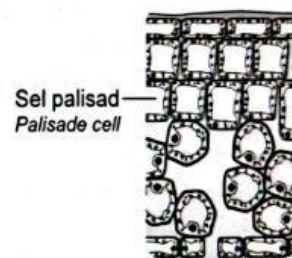
Apakah fungsi sistem X?

What is the function of system X?

- A Menyingkirkan hasil perkumuhan daripada badan
Removes excretory products from the body
B Membantu dalam pergerakan badan
Assists in body movement
C Mengawal pergerakan makanan dalam badan
Controls the movement of food in the body
D Mencernakan bahan makanan yang kompleks kepada bentuk yang lebih ringkas
Breaks down complex food into simpler form

7. Rajah 4 menunjukkan keratan rentas sehelai daun hijau.

Diagram 4 shows the cross-section of a green leaf.



Rajah 4 / Diagram 4

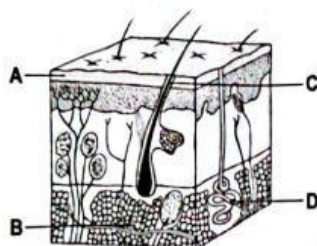
Sekiranya sel palisad dikeluarkan, apakah yang akan berlaku pada tumbuhan selepas satu minggu?

If the palisade cells are removed, what will happen to the plant after a week?

- A Tumbuhan menjadi semakin tinggi.
The plant grows taller.
B Tumbuhan akan layu.
The plant will wither.
C Tumbuhan akan menghasilkan daun baharu.
The plant will generate new leaves.
D Tumbuhan kekal dalam keadaan sama.
The plant remains in the same condition.

8. Rajah 5 menunjukkan keratan rentas kulit manusia. Antara bahagian kulit berikut, yang manakah akan mengembang ketika didedahkan dengan suhu persekitaran yang tinggi?

Diagram 5 shows the cross-section of human skin. Which of the following parts of the skin will dilate when exposed to high surrounding temperature?



Rajah 5 / Diagram 5

9. Antara yang berikut, pernyataan manakah yang betul?
Which of the following is the correct statement?

- A Suhu badan manusia berubah mengikut suhu persekitaran.
Human body temperature changes according to surrounding temperature.
- B Kandungan air dalam badan dikawal atur melalui kehilangan air peluh sahaja.
The water content in the body is regulated through the loss of water by sweating only.
- C Insulin mengawal atur paras glukosa dalam darah.
Insulin regulates the level of glucose in the blood.
- D Kucing menegakkan bulunya untuk meningkatkan suhu badan.
Cat straightens its fur to increase its body temperature.

10. Organ manakah yang mengawal atur paras oksigen dalam darah?
Which organ regulates the level of oxygen in the blood?

- A Paru-paru
Lung
- B Jantung
Heart
- C Kulit
Skin
- D Hati
Liver

11. Apakah organ yang mengawal atur jumlah air dalam badan manusia?
Which organ regulates the total water content in human body?

- A Trakea
Trachea
- B Mata
Eyes
- C Perut
Stomach
- D Buah pinggang
Kidney

12. Apakah fungsi sistem otot?
What is the function of muscular system?

- A Menyerap oksigen dan membebaskan karbon dioksida
Absorbs oxygen and releases carbon dioxide
- B Menghalang badan daripada jangkitan
Defends the body against infections
- C Membantu manusia untuk bergerak
Assists humans in movement
- D Menghasilkan sel sperma, telur dan hormon bagi menghasilkan anak
Produces sperm cells, ova and hormones to produce offspring