## BAHAGIAN A

[20 *markah*]
[20 *marks*]
*Jawab* **semua** *soalan.*
*Answer* **all** *questions.*

1 Antara yang berikut, yang manakah maksud biodiversiti?
*Which of the following is the meaning of biodiversity?*

**A** Kepelbagaian organisma.
*The diversity of organisms.*

**B** Kepelbagaian organisma yang boleh membuat makanan sendiri.
*The diversity of organisms that produces its own food.*

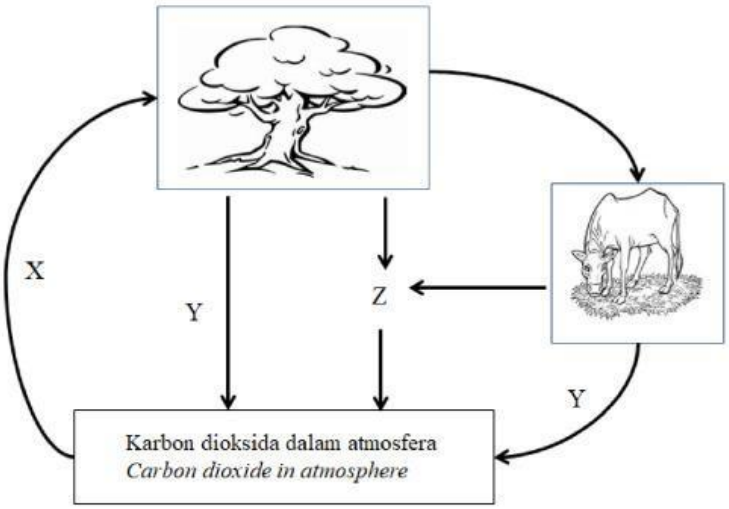
**C** Kepelbagaian organisma yang sama spesies dan hidup di habitat yang sama.
*The diversity of organisms of the same species that live in the same habitat.*

**D** Kepelbagaian organisma berlainan spesies berinteraksi antara satu sama lain.
*The diversity of organisms between different species interact with one another.*



LIVEWORKSHEETS

2 Rajah di bawah menunjukkan kitar karbon.
*Diagram below shows the carbon cycle.*




Antara berikut yang manakah mewakili X, Y dan Z?
*Which of the following represents* X, Y *and* Z?

| | X | Y | Z |
|---|---|---|---|
| A | Pereputan *Decay* | Respirasi *Respiration* | Fotosintesis *Photosynthesis* |
| B | Pereputan *Decay* | Fotosintesis *Photosynthesis* | Respirasi *Respiration* |
| C | Fotosintesis *Photosynthesis* | Respirasi *Respiration* | Pereputan *Decay* |
| D | Respirasi *Respiration* | Pereputan *Decay* | Fotosintesis *Photosynthesis* |



LIVEWORKSHEETS

3 Jadual di bawah menunjukkan nilai kalori bagi 4 jenis makanan.
*Table below shows the calorie value of 4 types of food.*

| **Makanan** *Food* | **Kuantiti** *Quantity* | **Nilai kalori (kcal)** *Caloric value* **(kcal)** |
|---|---|---|
| **Roti canai** *Roti canai* | 1 keping *1 piece* | 320 |
| **Nasi lemak** Nasi lemak | 1 set *1 set* | 320 |
| **Minuman bercoklat** *Choclate drink* | 1 gelas *1 glass* | 170 |
| **Nanas** *Pineapple* | 1 keping *1 piece* | 60 |

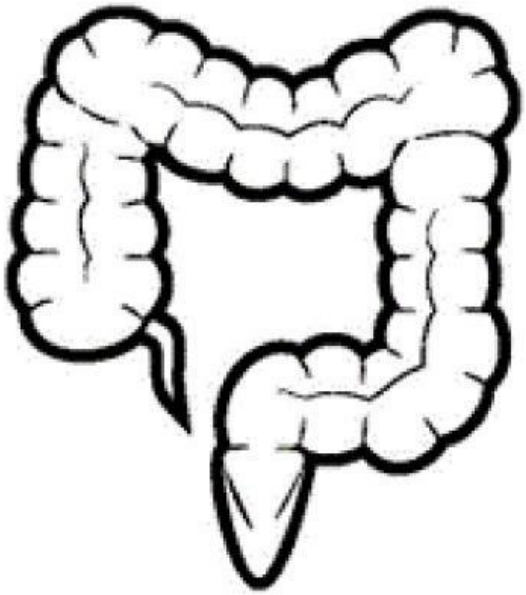
Jika Aira makan sekeping roti canai, satu set nasi lemak, segelas minuman bercoklat dan dua keping nanas. Kira nilai kalori yang diambil oleh Aira.
*If Aira eats a piece of roti canai, a set of nasi lemak, a glass of chocolate drink and two pieces of pineapple. Calculate the calorie value taken by Aira.*

**A** 870 kcal
**B** 930 kcal
**C** 1190 kcal
**D** 1250 kcal



LIVEWORKSHEETS

4 Rajah di bawah menunjukkan satu organ dalam sistem pencernaan.
*The diagram below shows an organ in the digestive system.*



Namakan organ di atas dan contoh bahan yang diserap olehnya.
*Name the organ above and an example of substance absorbed by it.*

| | **Organ** *Organ* | **Bahan yang diserap** *Absorbed substance* |
|---|---|---|
| **A** | Usus kecil *Small intestine* | Glukosa *Glucose* |
| **B** | Usus kecil *Small intestine* | Kanji *Starch* |
| **C** | Usus besar *Large intestine* | Pelawas Fibre |
| **D** | Usus besar *Large intestine* | Mineral *Mineral* |



LIVEWORKSHEETS

5 Rajah di bawah menunjukkan sebuah piramid makanan.
*The diagram below shows a food pyramid.*

Apakah kelas makanan berlabel X dan Y?
*What are food classes labeled X and Y?*

| | X | Y |
|---|---|---|
| A | Lemak<br>*Fat* | Vitamin<br>*Vitamin* |
| B | Protein<br>*Protein* | Lemak<br>*Fat* |
| C | Protein<br>*Protein* | Karbohidrat<br>*Carbohydrate* |
| D | Karbohidrat<br>*Carbohydrate* | Lemak<br>*Fat* |



LIVEWORKSHEETS

6 Jadual di bawah menunjukkan beberapa contoh penyakit berjangkit dan penyakit yang tidak berjangkit yang terdapat di Malaysia.
*The table below shows some examples of infectious diseases and non-infectious diseases found in Malaysia*

| | Penyakit Berjangkit<br>*Infectious Diseases* | Penyakit Tidak Berjangkit<br>*Non-infectious Diseases* |
|---|---|---|
| I | Taun<br>*Cholera* | Panau<br>*Tinea* |
| II | Demam Kepialu<br>*Tyhoid Fever* | Penyakit Kardiovaskular<br>*Cardiovascular Diseases* |
| III | Cacar Air<br>*Chickenpox* | Diabetes<br>*Diabetes* |
| IV | Tuberkulosis<br>*Tuberculosis* | Chikungunya<br>*Chikungunya* |

Antara penyakit-penyakit berikut, padanan manakah yang betul?
*Which of the following match of diseases is correct?*

**A** I dan II
*I and II*

**B** II dan III
*II and III*

**C** III dan IV
*III and IV*

**D** I dan IV
*I and IV*



LIVEWORKSHEETS

7 Rajah di bawah menunjukkan mekanisme pertahanan badan.
*Digram below show body defence mechanism.*

Apakah fungsi mekanisme tersebut?
*What is the function of the mechanisme?*

**A** Sebagai antiseptik
*As an antiseptic*

**B** Gerak balas terhadap antigen
*Respond to antigen*

**C** Memusnahkan mikroorganisma
*Kills microorganism*

**D** Menelan dan mencerna patogen dengan menggunakan enzim
*Engulf and digest the pathogens using enzymes*



LIVEWORKSHEETS

8 Rajah di bawah menunjukkan kawasan yang mengalami masalah pencemaran.
*Diagram below shows areas that suffer from pollution problems.*

Antara berikut yang manakah tindakan oleh individu untuk mengatasi pencemaran air tersebut?
*Which of the following actions by individuals to overcome water pollution*?

**A** Tidak membina kilang di kawasan berhampiran sungai.
*Not building a factory in an area near the river.*

**B** Meronda di lautan untuk mencegah tumpahan minyak.
*Patrol the ocean to prevent oil spills.*

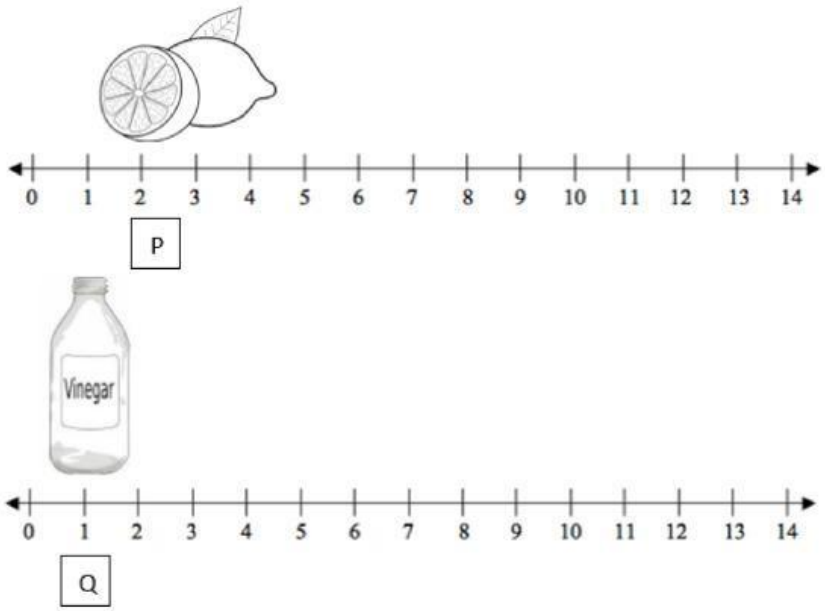
**C** Tidak membuang sampah ke dalam sungai, kolam dan laut
*Do not throw garbage into rivers, ponds and sea.*

**D** Membuat laporan kepada pihak berkuasa jika menemui sesiapa yang mencemarkan air dan alam sekitar
*Make a report to the authorities if you find anyone polluting water and the environment.*



LIVEWORKSHEETS

9 Rajah menunjukkan nilai pH bagi dua jenis bahan, P dan Q.
*The diagram below shows the pH value of two substances, P and Q.*




Antara berikut, yang manakah merupakan ciri bagi bahan P dan Q?
*Which of the following is the properties of the substances P dan Q?*

**A** Berasa pahit.
*Taste bitter*

**B** Tidak bertindak balas dengan logam.
*Does not react with water.*

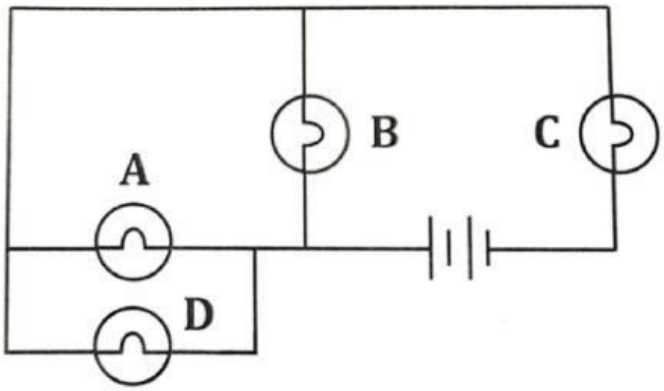
**C** Menukarkan kertas litmus biru kepada merah.
*Turns blue litmus paper to red.*

**D** Menukarkan warna penunjuk semesta kepada biru.
*Universal indicator changes to blue.*



LIVEWORKSHEETS

10 Amin mendapati bahawa semua mentol terpadam secara tiba-tiba. Walaupun sudah ditukar dengan bateri baru, semua mentol masih tidak menyala.
*Amin noticed that all the bulbs went out suddenly. Although new batteries have been replaced, all the bulbs still do not light up.*




Apakah punca kepada masalah ini?
*What is the cause of this problem?*

**A** Mentol A rosak
*Bulb A is damaged*

**B** Mentol B rosak
*Bulb B is damaged*

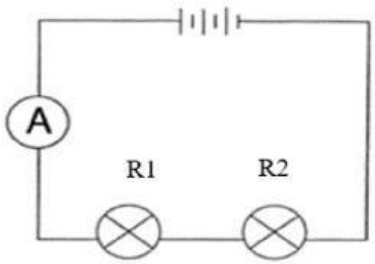
**C** Mentol C terbakar
*Bulb C burns out*

**D** Mentol D terbakar
*Bulb D burns out*



LIVEWORKSHEETS

11 Rajah di bawah menunjukkan satu litar yang lengkap.
*The diagram below shows a complete circuit.*




Antara yang berikut, yang manakah menerangkan ciri litar dengan tepat.
*Which of the following accurately describes the characteristics of a circuit.*

**A** $R = \frac{1}{R1} + \frac{1}{R2}$

**B** $R = R1 + R2$

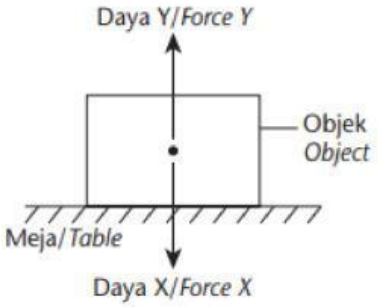
**C** $R = R1 = R2$

**D** $R = R1 \div R2$



LIVEWORKSHEETS

12 Seorang murid menjalankan eksperimen seperti dalam rajah di bawah.
*A student conducts an experiment as shown in the diagram below.*




Apakah daya X dan daya Y?
*What is force* X *and force* Y?

**A** X: Daya normal
*Normal force*
Y: Daya graviti
*Gravitational force*

**B** X: Daya graviti
*Gravitational force*
Y: Daya normal
*Normal force*

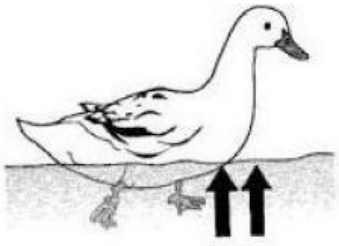
**C** X: Daya graviti
*Gravitational force*
Y: Daya apungan
*Buoyant force*

**D** X: Daya apungan
*Buoyant force*
Y: Daya graviti
*Gravitational force*



LIVEWORKSHEETS

13 Rajah di bawah menunjukkan sejenis daya.
*Diagram below shows a type of force.*



Apakah daya yang dimaksudkan itu?
*What is the intended force?*

**A** Daya kinetik
*Kinetic force*

**B** Daya apungan
*Buoyant force*

**C** Daya tolakan
*Push force*

**D** Daya graviti
*Gravitational force*



LIVEWORKSHEETS

14 Rajah di bawah menunjukkan seorang lelaki sedang membawa tanah di dalam kereta sorong yang berjisim 600 N.
*Diagram below shows a man carrying soil in a wheelbarrow with a mass of 600 N.*

Hitungkan magnitud daya yang perlu digunakan oleh lelaki itu untuk menolak kereta sorong tersebut.
*Calculate the magnitude of the force that the man must use to push the wheelbarrow.*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Beban (N) | x | Jarak beban dari fulkrum (m) | = | Daya (N) | x | Jarak daya dari fulkrum (m) |
| *Load (N)* | *x* | *Distance of load from fulcrum (m)* | = | *Effort (N)* | *x* | *Distance of effort from fulcrum (m)* |

**A** 200 N
**B** 300 N
**C** 1200 N
**D** 1800 N



LIVEWORKSHEETS

15 Antara berikut, yang manakah benar mengenai suhu?
*Which of the following is true about temperature?*

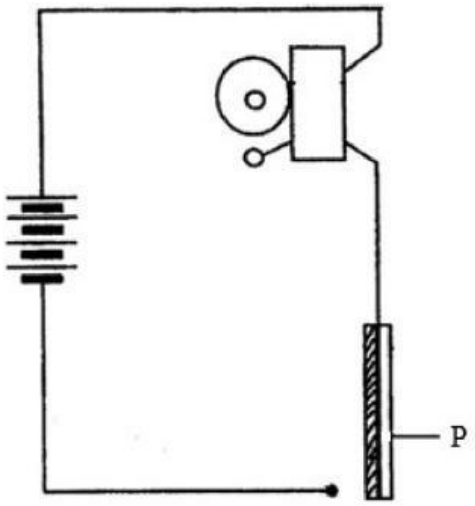
**A** Suatu bentuk tenaga
*A form of energy*

**B** Diukur dalam joule (J)
*Measured in joule (J)*

**C** Suhu merupakan darjah kepanasan dan kesejukan objek
*Temperature is the degree of hotness or coldness of an object*

**D** Kandungan suhu bergantung pada jenis bahan, kuantiti bahan dan haba
*The content of temperature depends on the type of material, quantity of material and temperature*

16 Rajah di bawah menunjukkan model sistem penggera kebakaran.
*Diagram below shows model of fire alarm system.*




Apakah fungsi komponen P?
*What is the function of component* P?

**A** Mengesan haba, mengecut dan menjadikan litar lengkap
*detects heat, compresses and makes a complete circuit*

**B** Mengesan cahaya, mengecut dan menjadikan litar lengkap
*Detect light, compresses and make complete circuit*

**C** Mengesan haba, mengembang dan menjadikan litar lengkap
*Detects heat, expands and makes a complete circuit*

**D** Mengesan cahaya, mengembang dan menjadikan litar lengkap
*Detect light, expand and make a complete circuit*



LIVEWORKSHEETS