

## Bahagian A / Section A [20 markah / 20 marks]

Jawab semua soalan.  
Answer all questions.

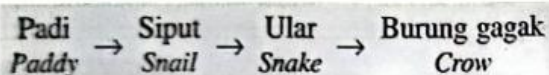
1. Apakah persamaan antara amfibia dengan reptilia?

*What is the similarity between amphibians and reptiles?*

- A Melakukan persenyawaan luar  
*Undergo external fertilisation*
- B Menghasilkan telur yang bercangkerang  
*Produce egg with a shell*
- C Boleh hidup di darat dan di air  
*Can live on land and in water*
- D Bersisik dan berkulit keras  
*Have scales and hard skin*

2. Dalam siratan makanan di bawah, haiwan yang manakah merupakan pengguna primer?

*In the food web below, which animal is the primary consumer?*



- A Padi  
*Paddy*
- B Ular  
*Snake*
- C Siput  
*Snail*
- D Burung gagak  
*Crow*

3. Proses yang manakah tidak mengekalkan kandungan karbon dioksida dan oksigen di dalam udara?

*Which process does not maintain the content of carbon dioxide and oxygen in the air?*

- A Fotosintesis  
*Photosynthesis*
- B Respirasi  
*Respiration*
- C Pereputan  
*Decomposition*
- D Penyahinjaan  
*Defaecation*

4. Rajah 1 menunjukkan seekor lebah sedang menghisap madu dari sekuntum bunga.

*Diagram 1 shows a bee sucking honey from a flower.*



Rajah 1 / Diagram 1

Apakah jenis interaksi antara lebah dengan bunga?

*What is the type of interaction between the bee and the flower?*

- A Mutualisme  
*Mutualism*
- B Komensalisme  
*Commensalism*
- C Parasitisme  
*Parasitism*
- D Mangsa-pemangsa  
*Prey-predator*

5. Apakah jenis ujian yang boleh menentukan kandungan zat makanan kekacang?

*What type of test can be used to determine the nutrient of nuts?*

- A Ujian iodin  
*Iodine test*
- B Ujian Benedict  
*Benedict's test*
- C Ujian Millon  
*Millon's test*
- D Ujian alkohol-emulsi  
*Alcohol-emulsion test*

6. Pernyataan yang manakah benar mengenai jangkitan virus COVID-19?  
Which statement is true about the infection of COVID-19?

A Merupakan suatu penyakit berjangkit genetik  
*It is a genetic infectious disease*  
B Virus boleh berjangkit melalui makanan  
*The virus can be transmitted through food*  
C Vektor jangkitan ialah nyamuk  
*Vector of transmission is mosquito*  
D Pengambilan vaksin COVID-19 merupakan keimunan aktif  
*COVID-19 vaccination is an active immunisation*

7. Antara berikut, pernyataan yang manakah benar mengenai air?  
Which of the following statements is true about water?

I Air terdiri daripada dua atom oksigen dan satu atom hidrogen  
*Water consists of two oxygen atoms and one hydrogen atom*  
II Komposisi air boleh diuraikan melalui proses elektrolisis  
*Water composition can be extracted through electrolysis*  
III Air yang mengandungi pasir boleh menaikkan takat didihnya  
*Water that contains sand can increase its boiling point*  
IV Air boleh wujud dalam bentuk pepejal, cecair dan gas  
*Water can exist in the form of solid, liquid and gas*

A II sahaja  
*II only*  
B I dan II  
*I and II*  
C II dan IV  
*II and IV*  
D I, II dan III  
*I, II and III*

8. Cara-cara menyidai pakaian yang manakah mempercepatkan kadar penyejatan?  
Which method of drying cloths will speed up the rate of evaporation?

A



B



C



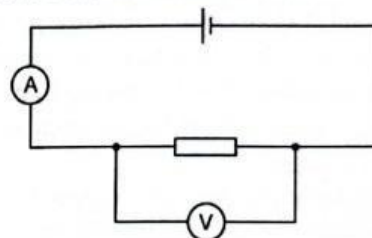
D



9. Pernyataan yang manakah tidak benar mengenai cuka?  
Which of the following statements is not true about vinegar?

A Nilai pH cuka ialah 5  
*The pH value of vinegar is 5*  
B Cuka menukarkan kertas litmus biru ke merah  
*Vinegar changes blue litmus paper to red*  
C Cuka menukarkan penunjuk semesta dari merah ke biru  
*Vinegar changes universal indicator from red to blue*  
D Cuka bertindak balas dengan logam dan menghasilkan gas hidrogen  
*Vinegar reacts with metal to produce hydrogen gas*

10. Rajah 2 menunjukkan suatu litar elektrik.  
Diagram 2 shows an electric circuit.



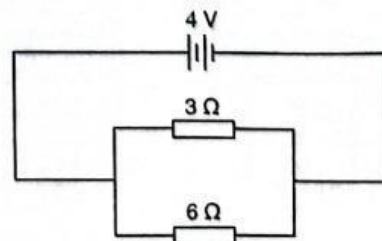
Rajah 2 / Diagram 2

Apabila perintang  $5\ \Omega$  disambung kepada litar, bacaan voltmeter ialah 1.5 V. Hitung bacaan ammeter.

When a  $5\ \Omega$  resistor is connected to the circuit, the reading of the voltmeter is 1.5 V. Calculate the reading of the ammeter.

A 0.3 A  
B 3.33 A  
C 6.5 A  
D 7.5 A

11. Rajah 3 menunjukkan suatu litar elektrik.  
Diagram 3 shows an electric circuit.



Rajah 3 / Diagram 3

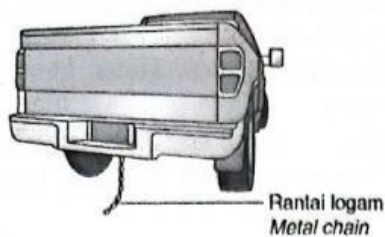
Berapakah jumlah rintangan berkesan bagi litar di atas?

What is the effective resistance in the circuit above?

A  $0.5\ \Omega$   
B  $2\ \Omega$   
C  $4\ \Omega$   
D  $9\ \Omega$



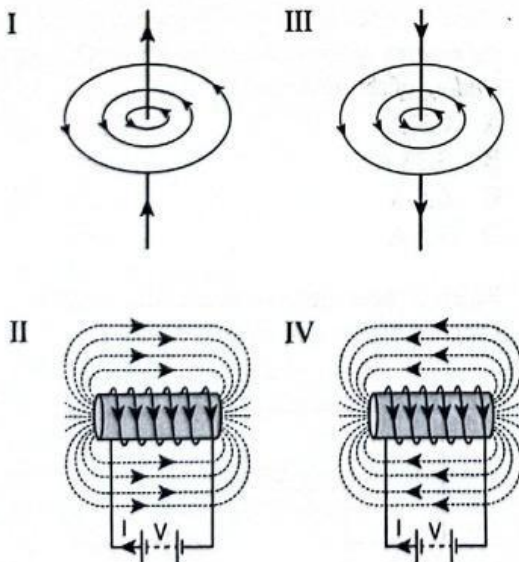
12. Rajah 4 menunjukkan rantai logam yang disambungkan di belakang sebuah kenderaan.  
Diagram 4 shows a metal chain which is attached to the back of a vehicle.



Rajah 4 / Diagram 4

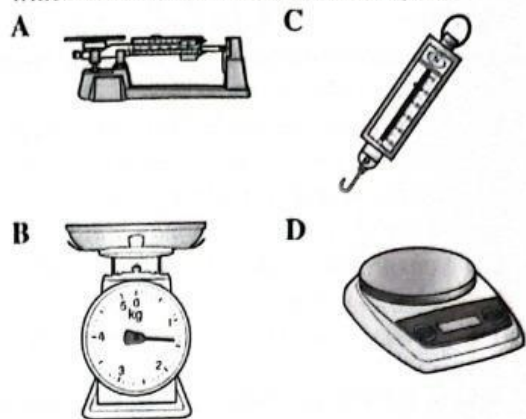
Apakah fungsi rantai logam tersebut?  
What is the function of the metal chain?

- A Mengelakkan kemalangan jalan raya  
Avoid road accident
- B Mengalirkan cas-cas elektrik ke Bumi  
Flow the electrical charges to the Earth
- C Mengalirkan cas-cas elektrik ke kenderaan  
Flow the electrical charges to the vehicle
- D Memaksimumkan pengaliran cas-cas elektrostatik bagi menambahkan kelajuan kenderaan  
Maximise the flow of electrostatic charges to increase the speed of the vehicle
13. Antara berikut, lukisan medan magnet yang manakah benar?  
Which of the following magnetic field drawing is correct?



- A I dan III  
I and III
- B I dan IV  
I and IV
- C II dan III  
II and III
- D II dan IV  
II and IV

14. Alat pengukuran yang manakah digunakan untuk mengukur daya?  
Which instrument is used to measure force?



15. Rajah 5 menunjukkan sebuah objek tenggelam di dalam air.  
Diagram 5 shows an object sinks in the water.



Rajah 5 / Diagram 5

Apakah hubungan antara berat objek,  $W$  dengan daya apungan,  $F$  yang bertindak ke atas objek tersebut?

What is the relationship between the weight,  $W$  and the buoyant force,  $F$  acting on the object?

- A  $W = F$  C  $W < F$
- B  $W > F$  D  $W \leq F$

16. Antara berikut, padanan yang manakah menunjukkan kelas tuas dan contoh tuas dengan betul?

Which of the following match show the class of lever and example of lever correctly?

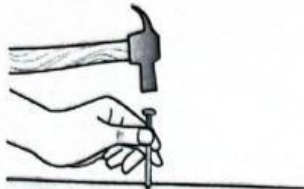
|   | Tuas kelas pertama<br>First class lever | Tuas kelas kedua<br>Second class lever | Tuas kelas ketiga<br>Third class lever |
|---|-----------------------------------------|----------------------------------------|----------------------------------------|
| A | Joran<br>Fishing rod                    | Gunting<br>Scissors                    | Tangan<br>Arm                          |
| B | Gunting<br>Scissors                     | Forsep<br>Forceps                      | Penyapu<br>Broom                       |
| C | Pembuka tin<br>Can opener               | Pemecah<br>kekeras<br>Nutcracker       | Tangan<br>Arm                          |
| D | Forsep<br>Forceps                       | Pemecah<br>kekeras<br>Nutcracker       | Tangan<br>Arm                          |

17. Antara berikut, yang manakah merupakan aplikasi tekanan tinggi dalam kehidupan harian?  
Which of the following is an application of high pressure in our daily life?

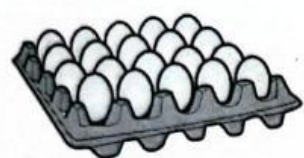
A



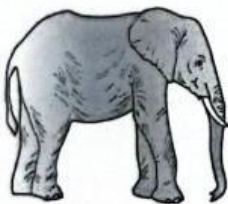
B



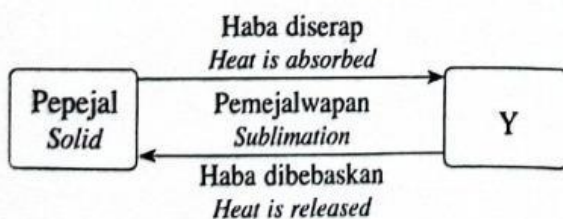
C



D



18. Rajah 6 menunjukkan perubahan suatu jirim.  
Diagram 6 shows a matter changes.



Rajah 6 / Diagram 6

Apakah Y?

What is Y?

- |                           |                    |
|---------------------------|--------------------|
| A Wap air<br>Water vapour | C Pepejal<br>Solid |
| B Cecair<br>Liquid        | D Gas<br>Gas       |

19. Apakah faktor yang mempengaruhi kekuatan bunyi yang dihasilkan?  
What factor affects the loudness of sound produced?

- A Kelangsingan bunyi  
Pitch of sound  
B Nilai Hertz bunyi  
Hertz value of sound  
C Frekuensi gelombang bunyi  
Frequency of sound wave  
D Amplitud gelombang bunyi  
Amplitude of sound wave

20. Susun planet-planet di bawah mengikut jarak daripada Matahari dalam urutan menurun.  
Arrange the planets below according to the distance from the Sun in descending order.

- |   |   |                     |
|---|---|---------------------|
| P | - | Neptun<br>Neptune   |
| Q | - | Musytari<br>Jupiter |
| R | - | Zuhal<br>Saturn     |
| S | - | Bumi<br>Earth       |
| T | - | Zuhrah<br>Venus     |
| U | - | Marikh<br>Mars      |
| V | - | Utarid<br>Mercury   |
| W | - | Uranus<br>Uranus    |

- A P, Q, R, S, T, U, V, W  
B W, R, S, T, Q, U, V, P  
C W, Q, P, U, R, S, T, V  
D P, W, R, Q, U, S, T, V