

Jawab semua soalan.

Answer all questions.

Bahagian A

1. Apakah unit S.I. tenaga?

What is the S.I. unit for energy?

- A Watt, W
- B Joule, J
- C Kelvin, K
- D Ampere, A

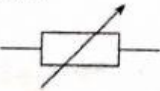
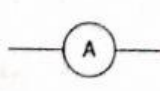
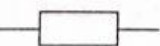
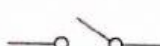
2. Pernyataan yang manakah tidak benar mengenai perintang?

Which of the statement is not correct about a resistor?

- A Ada dua jenis perintang
There are two types of resistors
- B Perintang tetap juga dikenali sebagai rheostat atau potentiometer
Fixed resistor are also called as rheostats or potentiometer
- C Perintang di mana nilai rintangannya tidak boleh diubah dikenali sebagai perintang piawai
A resistor where the resistance values cannot be changed is called as fixed resistor
- D Perintang di mana nilai rintangannya boleh diubah dikenali sebagai perintang boleh ubah
A resistor where the resistance values can be changed is called as variable resistor

3. Antara berikut, yang manakah simbol suis?

Which of the following is the symbol of switch?

- A 
- B 
- C 
- D 

4. Maklumat berikut adalah tentang ciri-ciri U.

The following information is about the characteristic of U.

Mempunyai dua kutub

Have two poles

Tertarik kepada bahan bermagnet

Attracted to magnetic materials

Berdasarkan maklumat di atas, apakah U?

Based on the information above, what is U?

- A Litar
Circuit
- B Magnet
Magnet
- C Geseran
Friction
- D Elektrostatik
Electrostatic

5. Antara berikut, yang manakah bukan aplikasi magnet dan elektromagnet?

Which of the following is not the application of magnet and electromagnet?

- A Getah
Rubber
- B Kompas
Compass
- C Kad kredit
Credit card
- D Loceng elektrik
Electric bell

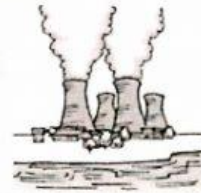
Bahagian B

1. (a) Namakan jenis tenaga dalam rajah di bawah.
Name the types of energy in the diagram below.

(i)



(ii)



- (b) Kenal pasti sama ada pernyataan berikut adalah BENAR atau PALSU.
Identify whether the following statements are TRUE or FALSE.

	Pernyataan Statement	BENAR / PALSU TRUE / FALSE
(i)	Tenaga bunyi merupakan sejenis tenaga. Sound energy is a type of energy.	
(ii)	Semua benda hidup memerlukan tenaga. All living things need energy.	
(iii)	Tenaga merupakan daya. Energy is force.	

2. (a) Tandakan (✓) bagi sumber tenaga dan (✗) bagi bukan sumber tenaga.
Mark (✓) for energy source and (✗) for not energy source.

(i)

☐

Matahari
Sun

(ii)

☐

Elektrik
Electric

(iii)

☐

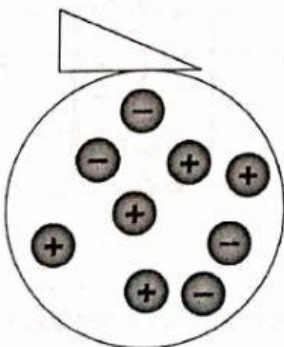
Geoterma
Geothermal

(iv)

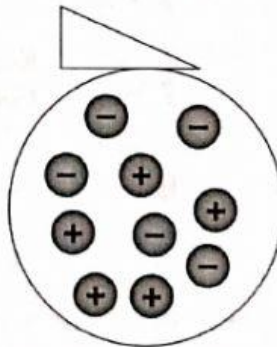
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Ombak
Wave

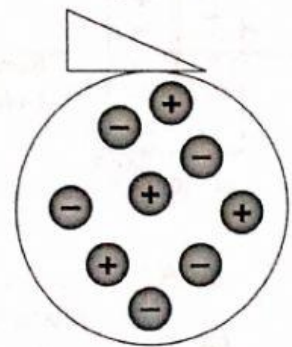
- (b) Bezakan objek-objek berikut dengan 'bercas positif', 'bercas negatif' atau 'neutral'.
Differentiate the following objects using 'positively charged', 'negatively charged' or 'neutral'.



(i)



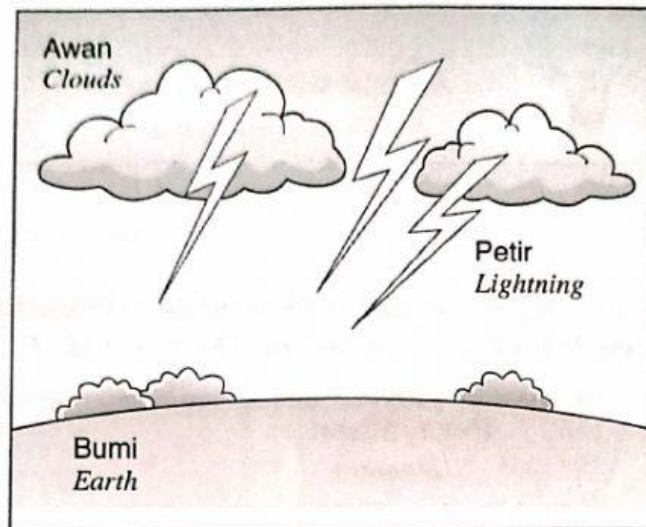
(ii)



(iii)

Bahagian C

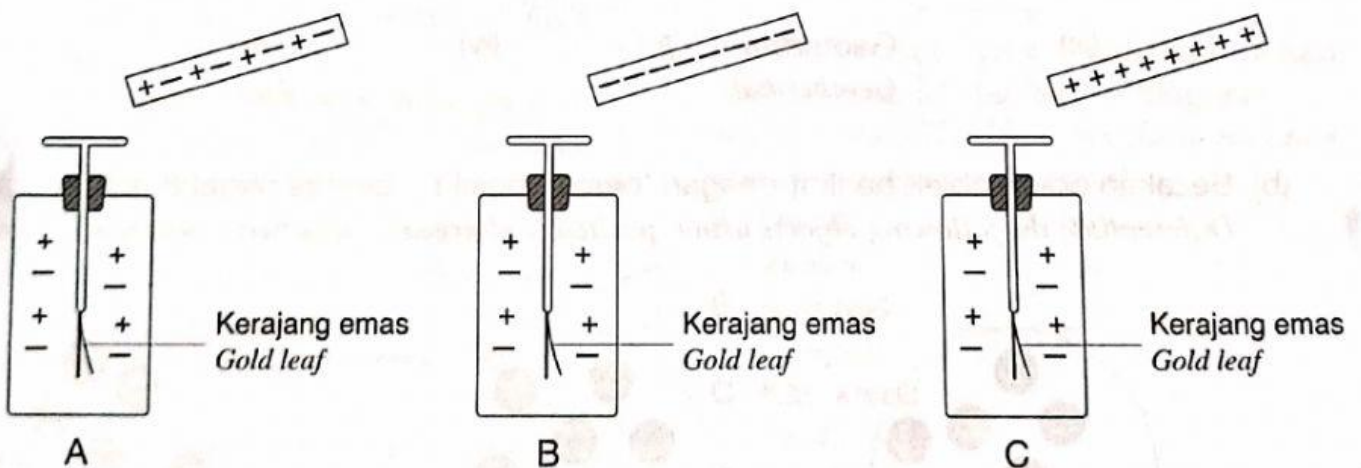
3. (a) Rajah berikut menunjukkan suatu situasi.
The following diagram shows a situation.



- (i) Lukiskan cas-cas positif dan cas-cas negatif pada awan dan bumi di rajah sebelah.
Draw positive charge and negative charge on the clouds and the earth in the above diagram.

- (ii) Nyatakan fungsi konduktor kilat.
State the function of lightning conductor.

- (b) Berdasarkan rajah di bawah, adakah kerajang emas akan mencapah?
Based on diagram below, is the gold leaf will diverge?



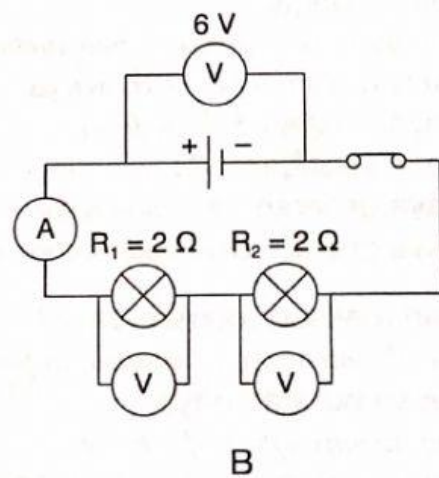
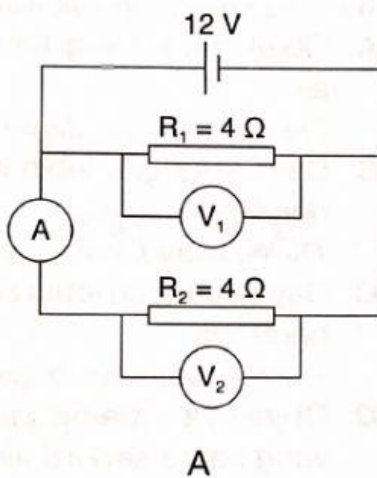
- (i) A: _____
 (ii) B: _____
 (iii) C: _____

4. Voltmeter dan ammeter merupakan alat penting dalam elektrik.
Voltmeter and ammeter are the main apparatus in electric.

(a) (i) Nyatakan unit S.I. bagi voltan.
State the S.I. unit for voltage.

(ii) Nyatakan fungsi ammeter.
State the function of an ammeter.

- (b) Rajah di bawah menunjukkan dua litar elektrik.
The diagram below shows two electric circuits.



- (i) Nyatakan jenis litar elektrik, A dan B.
State the types of electric circuits, A and B.

A : _____

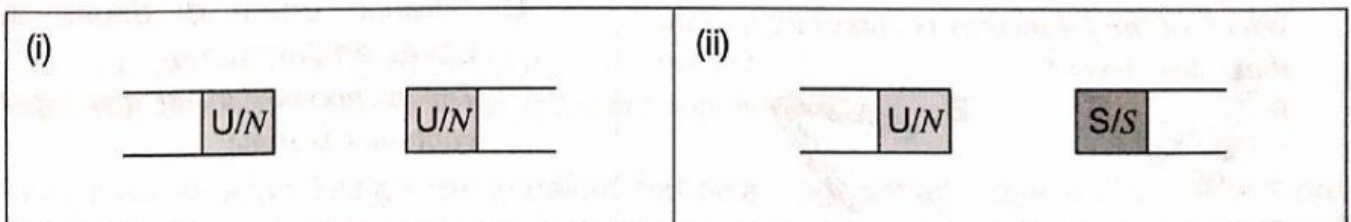
B : _____

- (ii) Hitungkan rintangan berkesan, R bagi kedua-dua litar elektrik.
Calculate the effective resistance, R for both electric circuits.

A :

B :

- (c) Lukis corak dan medan magnet bagi susunan magnet di bawah.
Draw patterns and magnetic fields for the magnet arrangement below.



- (d) Nyatakan cara untuk menentukan arah medan magnet pada dawai lurus.
State the way to determine the direction of the magnetic field in a straight wire.