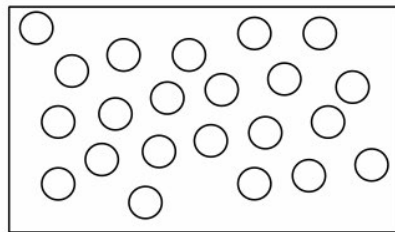


- 1 Jumlah proton dan neutron dikenali sebagai
The number of protons and neutrons is known as the

- A nombor atom
atomic number
- B nombor nukleon
nucleon number
- C nombor elektron
electron number
- D nombor cas
charge number

- 2 Rajah 1 menunjukkan susunan zarah bagi sebatian X.
Diagram 1 shows the arrangement of particles of substance X.



Rajah 1 / Diagram 1

Apakah keadaan jirim bagi sebatian X?
What is the state of matter of substance X?

- A Gas
Gas
- B Pepejal
Solid
- C Cecair
Liquid
- D Cecair-gas
Liquid-gas

- 3 Antara yang berikut, yang manakah mengandungi $6.02 \times 10^{23} \text{ mol}^{-1}$ atom?
Which of the following contains $6.02 \times 10^{23} \text{ mol}^{-1}$ atoms?

- A** 1 mol natrium klorida
1 mol of sodium chloride
- B** 1 mol gas ozon
1 mol of ozone gas
- C** 1 mol ferum
1 mol of iron
- D** 1 mol karbon dioksida
1 mol of carbon dioxide

- 4 Berapakah bilangan mol 56.4 g kuprum (II) nitrat, $\text{Cu}(\text{NO}_3)_2$?
What is the number of mole of 56.4 g copper(II) nitrate, $\text{Cu}(\text{NO}_3)_2$?
 [Jisim atom relatif : O = 16, Cu = 64, N = 14]
 [Relative atomic mass: O = 16, Cu = 64, N = 14]

- A** 3.33 mol
- B** 0.32 mol
- C** 0.45 mol
- D** 0.30 mol

- 5 Jadual 1 menunjukkan unsur gas adi serta kegunaannya.
Table 1 shows noble gas elements and its uses.

	Unsur <i>Element</i>	Kegunaan <i>Uses</i>
I	Argon <i>Argon</i>	Digunakan dalam laser untuk merawat retina mata <i>Used in lasers to treat eye retina</i>
II	Kripton <i>Krypton</i>	Digunakan dalam lampu denyar kilat pada kamera <i>Used in flashlight of camera</i>
III	Xenon <i>Xenon</i>	Diisi ke dalam mentol elektrik <i>To fill in light bulb</i>
IV	Radon <i>Radon</i>	Digunakan untuk merawat kanser <i>Used to treat cancer</i>

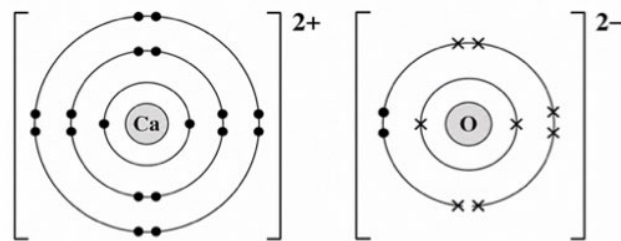
Jadual 1 / Table 1

Pasangan manakah dipadankan dengan betul?

Which pair is correctly matched?

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

- 6 Rajah 2 di bawah menunjukkan susunan elektron bagi kalsium oksida.
Diagram 2 below shows the electron arrangement of calcium oxide.



Rajah 2 / Diagram 2

Antara yang berikut, yang manakah **betul** tentang kalsium oksida?

*Which of the following about calcium oxide is **correct**?*

- A Atom kalsium berkongsi elektron dengan atom oksigen.
Calcium atom shares electrons with oxygen atom.
- B Atom kalsium memindahkan elektron kepada atom oksigen.
Calcium atom transfers electrons to oxygen atom.
- C Atom oksigen menderma elektron.
Oxygen atom donates electrons.
- D Atom kalsium menerima elektron.
Calcium atom receives electrons.



- 7 Zarah yang manakah menyebabkan asid sulfurik cair menunjukkan sifat keasidannya?
Which particle causes dilute sulphuric acid to show its acidic property?
- A H^+
 - B OH^-
 - C SO_4^{2-}
 - D H_2SO_4
- 8 Amin telah menambahkan mangkin dalam tindak balas antara zink dan asid hidroklorik. Bagaimana mangkin meningkatkan kadar tindak balas?
Amin has added catalyst into the reaction between zinc and hydrochloric acid. How does the catalyst increase the rate of reaction?
- A Mangkin meningkatkan tenaga pengaktifan tindak balas
A catalyst increases the activation energy of the reaction
 - B Mangkin menyediakan laluan alternatif dengan tenaga pengaktifan lebih rendah
A catalyst provides an alternative pathway with a lower activation energy
 - C Mangkin meningkatkan kepekatan bahan tindak balas
A catalyst increases the concentration of the reactants
 - D Mangkin menambah haba kepada tindak balas untuk mempercepatkan kadar tindak balas
A catalyst adds heat to the reaction to speed up the rate of reaction
- 9 Topi keledar yang diperbuat daripada bahan komposit merupakan gabungan plastik sebagai bahan matriks dan gentian gentian kaca sebagai bahan pengukuhan. Antara yang berikut, yang manakah merupakan sifat asas bagi komposit?
Helmet made of composite material are a combination of plastic as matrix substance and fiberglass as strengthening material. Which of the following is a basic property of composites?
- I Kekuatan regangan rendah
Low stretching strength
 - II Penebat haba
Heat insulator
 - III Tahan kakisan
Resistant to corrosion
 - IV Fleksibel
Flexible

- 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

- 10 Rajah 3 di bawah menunjukkan radas yang diperbuat daripada kaca.
Diagram 3 below shows an apparatus made of glass.



Rajah 3 / *Diagram 3*

Kaca manakah yang paling sesuai untuk menghasilkan radas di atas?
Which glass is most suitable to make the above apparatus?

- A** Kaca plumbum
Lead glass
- B** Kaca soda kapur
Soda lime glass
- C** Kaca borosilikat
Borosilicate glass
- D** Kaca silica terlakur
Fuse glass

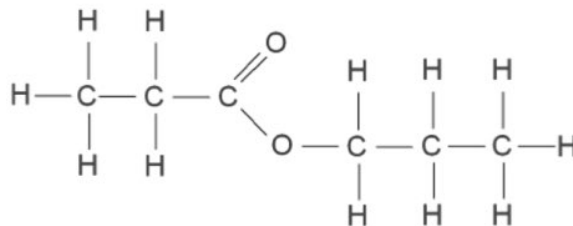
- 11 Antara berikut, yang manakah merupakan tindakbalas redoks?

Which of the following is a redox reaction?

- A Kakisan
Corrosion
- B Kondensasi
Condensation
- C Peneutralan
Neutralisation
- D Penghalogenan
Halogenation

- 12 Rajah 4 menunjukkan formula struktur suatu sebatian organik.

Diagram 4 shows the structural formula of an organic compound.



Rajah 4 / Diagram 4

Apakah nama sebatian organik itu?

What is the name of the organic compound?

- A Butil butanoat
Butyl butanoate
- B Butil propanoat
Butyl propanoate
- C Propil butanoat
Propyl butanoate
- D Propil propanoat
Propyl propanoate

- 13 Antara berikut, yang manakah proses endotermik?
Which of the following is an endothermic process?
- A Pembakaran metana
Combustion of methane
 - B Pelarutan ammonium nitrat dalam air
Dissolution of ammonium nitrate in water
 - C Peneutralan asid dan bes
Neutralisation of acid and alkali
 - D Pembekuan air
Freezing of water
- 14 Bahan yang manakah merupakan polimer semulajadi?
Which substance is a natural polymer?
- A Politena
Polythene
 - B Polistirena
Polystyrene
 - C Poliisoprena
Polyisoprene
 - D Polineoprena
Polyneoprene



SERTAI TELEGRAM @exercise_students

- 15 Antara bahan tambahan dalam detergen berikut, yang manakah menggalakkan pertumbuhan pesat alga dan rumpai dalam kolam, sungai dan tasik?

Which of the following additives in detergent encourages the fast growth of algae and weeds in ponds, rivers and lakes?

- A Silikat
Silicate
- B Sulfat
Sulphate
- C Klorat
Chlorate
- D Fosfat
Phosphate

- 16 Atom magnesium kehilangan dua elektron untuk membentuk ion Mg^{2+} . Apakah bilangan proton dan elektron dalam ion ini?

[Nombor proton Mg = 12]

A magnesium atom loses two electrons to form an Mg^{2+} ion. What is the number of protons and electrons in this ion?

[Proton number Mg = 12]

- A 12 proton, 10 elektron
12 protons, 10 electrons
- B 10 proton, 12 elektron
10 protons, 12 electrons
- C 12 proton, 12 elektron
12 protons, 12 electrons
- D 10 proton, 10 elektron
10 protons, 10 electrons

- 17 Apakah peratus komposisi mengikut jisim bagi atom nitrogen dalam ammonium sulfat, $(\text{NH}_4)_2\text{SO}_4$?

[Jisim atom relatif: H = 1; N = 14; O = 16; S = 32]

What is the percentage of composition by mass of nitrogen atom in ammonium sulphate, $(\text{NH}_4)_2\text{SO}_4$?

[Relative atomic mass: H = 1; N = 14; O = 16; S = 32]

- A 10.61 %
- B 21.88 %
- C 21.21 %
- D 24.56 %

- 18 Maklumat berikut adalah mengenai atom G.

The following information is about atom G

- Unsur G berada dalam Kumpulan 16 dalam Jadual Berkala Unsur
Element G is in Group 16 in the Periodic Table of Elements
- Unsur G diletakkan dalam Kala 2 dalam Jadual Berkala Unsur
Element G is placed in Period 2 in the Periodic Table of Elements

Yang manakah susunan elektron bagi atom G?

Which is the electron arrangement for atom G?

- A 2.4
- B 2.6
- C 2.8.6
- D 2.8.8.6

- 19 Jadual 2 di bawah menunjukkan nombor proton bagi enam unsur P, Q, R, S, T dan U.
Table 2 below shows the proton numbers of six elements P, Q, R, S, T and U.

Unsur <i>Element</i>	P	Q	R	S	T	U
Nombor proton <i>Proton number</i>	1	6	8	11	12	17

Jadual 2 / Table 2

Antara pasangan unsur berikut, yang manakah boleh mengkonduksikan arus elektrik dalam larutan akueus?

Which of the following pair of elements can conduct electricity in aqueous solutions?

- A P dan Q
P and Q
- B P dan S
P and S
- C R dan T
R and T
- D R dan U
R and U
- 20 Satu unsur X membentuk sebatian kovalen dengan hidrogen. Sebatian kovalen itu juga membentuk ikatan hidrogen antara molekul.
An element X forms a covalent compound with hydrogen. The covalent compound also forms hydrogen bond between molecules.

Antara yang berikut, yang manakah unsur X?

Which of the following is element X?

- A Karbon
Carbon
- B Nitrogen
Nitrogen
- C Sulfur
Sulphur
- D Klorin
Chlorine



- 21 Antara yang berikut, garam manakah yang disediakan melalui tindak balas penguraian ganda dua?
Which of the following salts is prepared through double decomposition reaction?

- A** Ammonium karbonat
Ammonium carbonate
- B** Magnesium klorida
Magnesium chloride
- C** Kalsium nitrat
Calcium nitrate
- D** Barium sulfat
Barium sulphate

- 22 Maklumat berikut menunjukkan notasi sel dan nilai voltan bagi dua sel kimia.
The following information shows the cell notation and voltage for two chemical cells.

Sel I	$\text{Zn(p)} \mid \text{Zn}^{2+}(\text{ak}) \parallel \text{Cu}^{2+}(\text{ak}) \mid \text{Cu(p)}$	$E^\circ \text{ sel} = +1.10 \text{ V}$
Cell I	$\text{Zn(s)} \mid \text{Zn}^{2+}(\text{aq}) \parallel \text{Cu}^{2+}(\text{aq}) \mid \text{Cu(s)}$	$E^\circ \text{ cell} = +1.10 \text{ V}$
Sel II	$\text{Cu(p)} \mid \text{Cu}^{2+}(\text{ak}) \parallel \text{Ag}^+(\text{ak}) \mid \text{Ag(p)}$	$E^\circ \text{ sel} = +0.46 \text{ V}$
Cell II	$\text{Cu(s)} \mid \text{Cu}^{2+}(\text{aq}) \parallel \text{Ag}^+(\text{aq}) \mid \text{Ag(s)}$	$E^\circ \text{ cell} = +0.46 \text{ V}$

Apakah nilai voltan bagi sel kimia jika notasi sel ialah

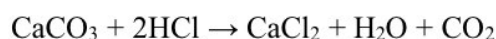
$\text{Zn(p/s)} \mid \text{Zn}^{2+}(\text{ak/aq}) \parallel \text{Ag}^+(\text{ak/aq}) \mid \text{Ag(p/s)}$ dan nilai E° bagi Cu ialah $+0.34\text{V}$?

What is the voltage of the chemical cell if the cell notation is

$\text{Zn(p/s)} \mid \text{Zn}^{2+}(\text{ak/aq}) \parallel \text{Ag}^+(\text{ak/aq}) \mid \text{Ag(p/s)}$ and the E° value of Cu is $+0.34\text{V}$?

- A** 0.64 V
- B** 1.22 V
- C** 1.56 V
- D** 1.86 V

- 23 Persamaan kimia di bawah menunjukkan tindak balas untuk menghasilkan gas karbon dioksida.
The chemical equation below shows a reaction to produce carbon dioxide gas.



Antara berikut, yang manakah boleh mencepatkan tindak balas di atas berlaku?
Which of the following would make the reaction above occur faster?

- A Menambahkan isi padu asid hidroklorik
Increase the volume of hydrochloric acid
 - B Menggunakan serbuk kalsium karbonat
Use powder of calcium carbonate
 - C Merendahkan suhu campuran
Decrease the temperature of the mixture
 - D Menambahkan larutan kuprum(II) sulfat
Add copper(II) sulphate solution
- 24 Rajah 5 di bawah menunjukkan cakera brek yang banyak digunakan dalam kenderaan.
Diagram 5 below shows the brake disc used in the vehicle.



Rajah 5 / Diagram 5

Antara aloi dan logam utama yang berikut, yang manakah **benar**?
*Which of the following main alloys and metals is **true**?*

	Jenis seramik <i>Type of ceramic</i>	Sifat <i>Properties</i>
A	Seramik tradisional <i>Traditional ceramic</i>	Rintangan haba dan lelasan yang lebih tinggi <i>Higher resistance to heat dan abrasion</i>
B	Seramik termaju <i>Advance ceramic</i>	Rintangan haba dan lelasan yang lebih tinggi <i>Higher resistance to heat dan abrasion</i>

C	Seramik termaju <i>Advance ceramic</i>	Kurang daya tahan terhadap haba <i>Less resistance to heat</i>
D	Seramik tradisional <i>Traditional ceramic</i>	Kurang daya tahan terhadap haba <i>Less resistance to heat</i>

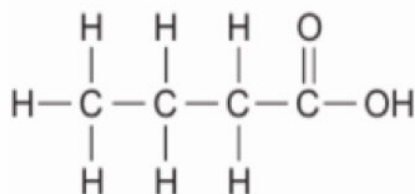
25 Antara yang berikut, yang manakah merupakan tindakbalas penurunan?

Which of the following is a reduction reaction?

- A** Atom Mg bertukar kepada ion Mg^{2+}
Mg atom changes to Mg^{2+}
- B** Ion O^{2-} bertukar kepada molekul O_2
 O^{2-} ion changes to O_2 molecule
- C** Ion MnO_4^- bertukar kepada ion Mn^{2+}
 MnO_4^- ion changes to Mn^{2+} ion
- D** Molekul H_2S bertukar kepada atom S
 H_2S molecule changes to S atom

26 Rajah 6 menunjukkan formula struktur bagi suatu sebatian.

Diagram 6 shows the structural formula of a compound.



Rajah 6 / Diagram 6

Antara berikut, pernyataan manakah yang **betul** tentang sebatian ini?

*Which of the following are the **correct** statements about the compound?*

- I** Larut dalam air
Soluble in water
- II** Sebatian hidrokarbon
Hydrocarbon compound
- III** Terhasil daripada tindak balas penghidrogenan alkena
Produced from hydrogenation of alkene
- IV** Bertindak balas dengan alkali menghasilkan garam dan air
Reacts with alkali to produce salt and water



- 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

27 Antara logam berikut, yang manakah akan menghasilkan haba penyesaran yang paling tinggi apabila menyesarkan kuprum daripada larutan kuprum(II) sulfat?

Among the following metals, which will produce the highest heat of displacement when displacing copper from copper(II) sulfate solution?

- A** Magnesium
Magnesium
- B** Zink
Zinc
- C** Ferum
Iron
- D** Plumbum
Lead

28 Antara yang berikut, yang manakah diperbuat daripada getah nitril?

Which of the following is made of nitrile rubber?

- A Beg plastik
Plastic bag
- B Tapak kasut
Shoe soles
- C Gelang getah
Rubber bands
- D Sarung tangan
Gloves

29 Maklumat berikut berkaitan dengan satu bahan tambahan makanan.

The following information relates to a food additive.

Bahan ini ditambah ke dalam makanan untuk melambatkan pertumbuhan bakteria dan kulat supaya makanan tahan lebih lama.

This substance is added to food to slow the growth of bacteria and fungi so that the food lasts longer.

Apakah contoh bahan tambahan makanan tersebut?

What is the example of such food additives?

- A Natrium benzoat
Sodium benzoate
- B Lesitin
Lecithin
- C Pektin
Pectin
- D Tokoferol
Tocopherol

- 30 Jadual 3 menunjukkan beberapa ciri bagi bahan P dan Q.
Table 3 shows some characteristics of substances P and Q.

Ciri-ciri <i>Characteristics</i>	P	Q
Keadaan pada suhu bilik <i>State at room temperature</i>	Cecair <i>Liquid</i>	Pepejal <i>Solid</i>
Sumber utama <i>Main source</i>	Tumbuhan <i>Plant</i>	Haiwan <i>Animal</i>
Tahap ketepuan <i>Degree of saturation</i>	Tidak tepu <i>Unsaturated</i>	Tepu <i>Saturated</i>

Jadual 3 / Table 3

Berdasarkan Jadual 3, apakah kesimpulan yang paling tepat tentang bahan P dan Q?
Based on Table 3, what is the most accurate conclusion about substances P and Q?

- A** P ialah lemak manakala Q ialah minyak.
P is fat while Q is an oil.
- B** P ialah minyak manakala Q ialah lemak.
P is an oil while Q is fat.
- C** Kedua-dua P dan Q adalah minyak.
Both P and Q are oils.
- D** Kedua-dua P dan Q adalah lemak.
Both P and Q are fats.



SERTAI TELEGRAM @exercise_students

- 31 Jadual 4 menunjukkan takat lebur dan takat didih untuk empat bahan W, X, Y dan Z.
Table 4 shows the melting point and boiling point of four substances W, X, Y and Z.

Bahan <i>Substance</i>	Takat lebur (°C) <i>Melting point (°C)</i>	Takat didih (°C) <i>Boiling point (°C)</i>
W	-187	-126
X	75	130
Y	114	444
Z	-79	68

Jadual 4 / *Table 4*

Antara berikut bahan yang manakah merupakan keadaan cecair pada suhu bilik ?
Which of the following substances is in liquid state at room temperature?

- A W
 B X
 C Y
 D Z
- 32 Rajah 7 menunjukkan kawasan pelupusan sampah.
Diagram 7 shows a waste disposal site.

18 dm³ gas metana, CH₄
 18 dm³ *methane gas*, CH₄



Rajah 7 / *Diagram 7*

Aktiviti mikroorganisma di kawasan itu menghasilkan gas metana.

Berapakah jisim gas metana yang terhasil?

The activity of microorganisms in the area produces methane gas.

What is the mass of methane gas produced?

[Jisim atom relatif: H = 1; C = 12; Isi padu molar gas pada suhu bilik = $24 \text{ dm}^3 \text{ mol}^{-1}$]

[Relative atomic mass: H = 1; C = 12; Molar volume of gas at room temperature = $24 \text{ dm}^3 \text{ mol}^{-1}$]

A 12 g

B 16 g

C 21 g

D 27 g

- 33 Sebuah makmal memerlukan gas yang boleh digunakan untuk membasmi kuman dalam air kolam renang. Unsur yang manakah paling sesuai?

A laboratory requires a gas that can be used to disinfect the water in a swimming pool. Which element is the most suitable?

A Astatin

Astatine

B Bromin

Bromine

C Klorin

Chlorine

D Fluorin

Fluorine

- 34 Asid sulfurik bertindak balas dengan larutan natrium hidroksida seperti yang ditunjukkan oleh persamaan kimia di bawah.

Sulphuric acid is reacted with sodium hydroxide solution as shown by the chemical equation below.



Berapakah isi padu larutan natrium hidroksida 1.0 mol dm^{-3} yang diperlukan untuk meneutralkan 25 cm^3 asid sulfurik 0.5 mol dm^{-3} ?

What is the volume of 1.0 mol dm^{-3} sodium hydroxide solution required to neutralise 25 cm^3 of 0.5 mol dm^{-3} sulphuric acid?

- A 6.25 cm^3
 - B 25.00 cm^3
 - C 12.50 cm^3
 - D 50.00 cm^3
- 35 Persamaan di bawah menunjukkan suatu tindak balas redoks.
Equation below shows a redox reaction.



Berdasarkan persamaan, ramalkan perubahan warna larutan kuprum(II) nitrat.

Based on the equation, predict the colour change of the copper(II) nitrate solution.

- A Warna biru dilunturkan
Blue colour is bleached
- B Warna biru tidak berubah
Blue colour remains unchanged
- C Warna biru menjadi perang
Blue colour turns brown
- D Warna biru menjadi tidak berwarna
Blue colour turns colourless



SERTAI TELEGRAM @exercise_students

- 36 Apakah hasil yang terbentuk apabila hidrogen dan propena dilalukan ke atas mangkin nikel pada suhu 180 °C?

What is the product formed when hydrogen and propene are passed over a nickel catalyst at temperature 180 °C?

- A Propana
Propane
- B Propanol
Propanol
- C Asid propanoik
Propanoic acid
- D Propil propanoat
Propyl propanoate

- 37 0.50 g propana dibakar sepenuhnya dalam kalorimeter untuk memanaskan 250.0 cm³ air dari 20.0°C ke 45.0°C. Apakah haba pembakaran bagi 1 mol propana.

[Jisim molar propana = 44.0 g mol⁻¹, muatan haba tentu larutan = 4.2 J g⁻¹ °C⁻¹; ketumpatan larutan = 1 g cm⁻³]

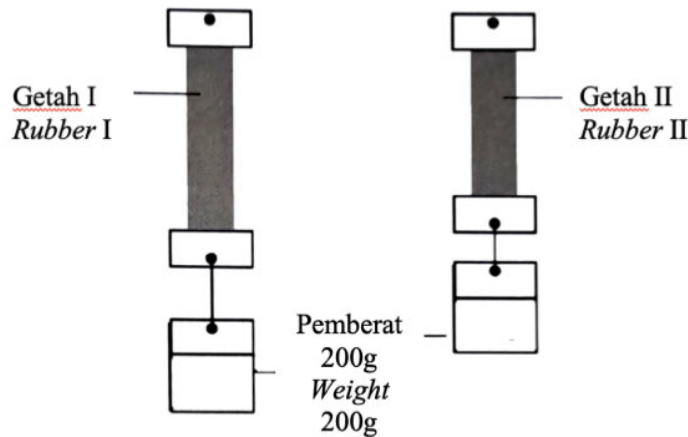
0.50 g of propane is burned completely in a calorimeter to heat 250.0 cm³ of water from 20.0°C to 45.0°C. What is the heat of combustion per mole of propane?

[Molar mass of propane = 44.0 g mol⁻¹, specific heat capacity of solution = 4.2 J g⁻¹ °C⁻¹; density of solution = 1 g cm⁻³]

- A -2220 kJ mol⁻¹
- B -2520 kJ mol⁻¹
- C -2420 kJ mol⁻¹
- D -2310 kJ mol⁻¹

- 38 Rajah 8 menunjukkan pemerhatian yang diperolehi daripada satu eksperimen yang dijalankan untuk mengkaji kekenyalan dua jenis getah.

Diagram 8 shows the observation obtained from the experiment carried out to investigate the elasticity of two types of rubber.



Rajah 8 / Diagram 8

Antara yang berikut, pernyataan manakah yang menerangkan perbandingan sifat itu?

Which of the following statements explains the comparison between this property?

- A** Daya tarikan antara polimer getah dalam getah II lebih kuat dengan kehadiran sulfur
Attraction forces of rubber polymer in rubber II is stronger with the presence of sulphur
- B** Kehadiran rangkaian silang sulfur menarik rantai polimer getah dalam getah II kepada susunan asal
The presence of sulphur cross link pulls the rubber polymer in rubber II back to its original arrangement
- C** Pembentukan rangkaian silang sulfur mengurangkan bilangan ikatan kovalen ganda dua dalam getah I.
The formation of sulphur cross link reduces the number of double covalent bond in rubber I.
- D** Jisim molekul relatif getah I lebih besar dengan kehadiran sulfur
Relative molecular mass of rubber I is greater with the presence of sulphur

- 39 Jadual 5 menunjukkan pemerhatian bagi dua ujian yang dijalankan untuk mengesahkan kation yang hadir dalam larutan garam W.

Table 5 shows the observations for two tests conducted to confirm the cation presents in salt W solution.

Ujian / Test	Pemerhatian / Observation
Tambahkan larutan NaOH sehingga berlebihan <i>Add in excess NaOH solution</i>	Mendakan putih larut dalam NaOH berlebihan <i>White precipitate soluble in excess NaOH</i>
Tambahkan larutan NH ₃ sehingga berlebihan <i>Add in excess NH₃ solution</i>	Mendakan putih larut dalam NH ₃ berlebihan <i>White precipitate soluble in excess NH₃</i>

Jadual 5 / Table 5

Apakah kation yang hadir dalam garam W?

What is the cation presents in salt W?

- A** Ion zink
Zinc ion
- B** Ion magnesium
Magnesium ion
- C** Ion aluminium
Aluminium ion
- D** Ion plumbum(II)
Lead(II) ion
- 40 Jadual 6 menunjukkan dua set eksperimen dijalankan untuk mengkaji kadar tindak balas antara zink dengan asid hidroklorik untuk membebaskan gas hidrogen.
Table 6 shows two set of experiments carried out to study the rate of reaction between zinc and hydrochloric acid to produce hydrogen gas.

SET	Bahan / Substances
I	Ketulan zink berlebihan dan 100 cm ³ of 0.5 mol dm ⁻³ asid hidroklorik <i>Excess zinc granules and 100 cm³ of 0.5 mol dm⁻³ hydrochloric acid</i>
II	Serbuk zink berlebihan dan 50 cm ³ of 0.5 mol dm ⁻³ asid hidroklorik <i>Excess powder zinc and 50 cm³ of 0.5 mol dm⁻³ hydrochloric acid</i>

Jadual 6 / Table 6

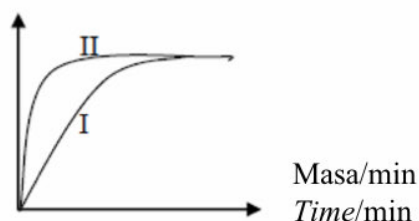


SERTAI TELEGRAM @exercise_students

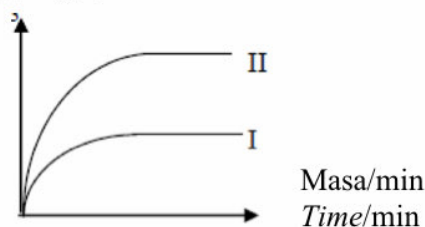
Antara berikut yang manakah graf yang **betul** mewakili keputusan bagi kedua-dua set eksperimen tersebut?

Which of the following graphs is **correct** to represents the results of both set of experiments?

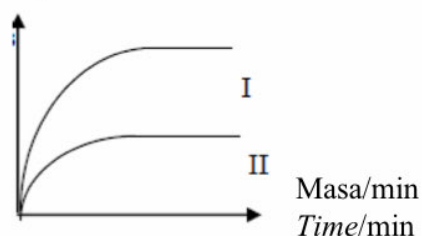
- A Volume of H_2 / cm^3
Isi padu H_2 / cm^3



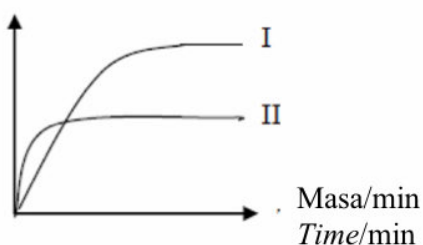
- B Volume of H_2 / cm^3
Isi padu H_2 / cm^3



- C Volume of H_2 / cm^3
Isi padu H_2 / cm^3



- D Volume of H_2 / cm^3
Isi padu H_2 / cm^3



KERTAS SOALAN TAMAT
END OF QUESTION PAPER

