

1. Seorang pesakit didiagnosiskan mempunyai kanser tiroid. Isotop manakah yang digunakan untuk merawat pesakit itu?
A patient is diagnosed of having thyroid cancer. Which isotope is used to treat the patient?

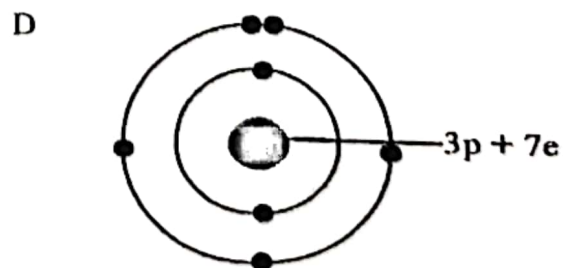
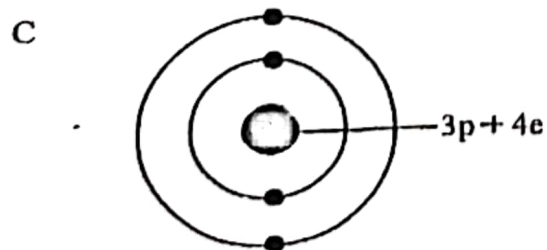
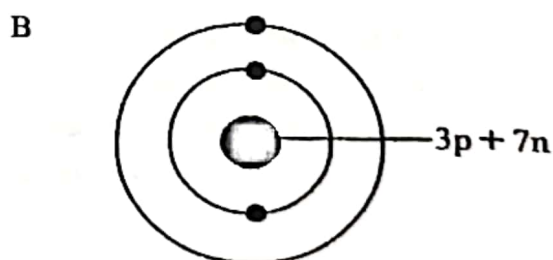
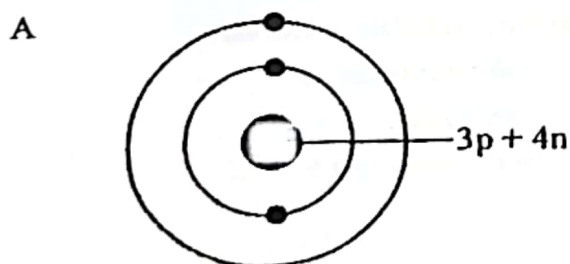
- A Karbon-14
Carbon-14
- B Natrium-24
Sodium-24
- C Kobalt-60
Cobalt-60
- D Iodine-131
Iodin-131

2. Maklumat berikut adalah mengenai atom T.
The following information is about atom T.

Bilangan proton ialah 3
Number of proton is 3

Nombor nukleon ialah 7
Nucleon number is 7

- Rajah yang manakah menunjukkan struktur bagi atom T?
Which diagram shows the structure of atom T?



- 3 Suatu atom bagi unsur E mempunyai 20 neutron. Nombor nukleon bagi unsur E ialah 39. Atom E menderma elektron untuk membentuk ion E.

Berapakah bilangan elektron dalam ion E?

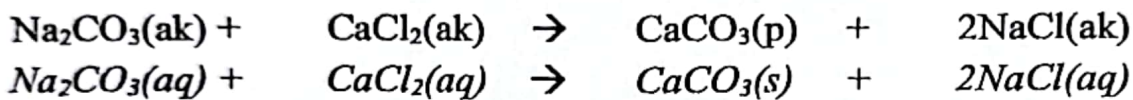
An atom of element E has 20 neutrons. The nucleon number of element E is 39. Atom E donates electrons to form ion E.

How many electrons in ion E?

- A 18
- B 19
- C 20
- D 21

- 4 Persamaan berikut mewakili satu tindak balas kimia.

The following equation represents a chemical reaction.



Penyataan manakah yang betul?

Which statement is correct?

- A Dua mol natrium karbonat bertindak balas dengan satu mol kalsium klorida
Two moles of sodium carbonate react with one mole of calcium chloride
- B Hasil tindak balas ialah pepejal kalsium karbonat dan larutan natrium klorida
The products are solid calcium carbonate and sodium chloride solution
- C Bahan tindak balas ialah pepejal natrium karbonat dan larutan kalsium klorida
The reactants are solid sodium carbonate and calcium chloride solution
- D Dua mol kalsium karbonat dan satu mol natrium klorida terbentuk
Two moles of calcium carbonate and one mole of sodium chloride are formed

5. Jadual 1 menunjukkan susunan elektron bagi unsur W, X, Y dan Z.
Table 1 shows the electron arrangement for element W, X, Y and Z.

Unsur <i>Element</i>	Susunan elektron <i>Electron arrangement</i>
W	2.4
X	2.8
Y	2.8.2
Z	2.8.7

Jadual 1 / *Table 1*

Unsur yang manakah merupakan suatu logam?
Which element is a metal?

- A W
- B X
- C Y
- D Z

- 6 Rajah 1 menunjukkan kedudukan element Y dalam Jadual Berkala Unsur.
Diagram 1 shows the position of element Y in the Periodic Table of Elements.

						Y											

Rajah 1 / Diagram 1

Antara yang berikut, yang manakah ciri-ciri bagi unsur Y?
Which of the following are the characteristics of element Y?

- I Larut dalam air
Dissolve in water
 - II Membentuk sebatian berwarna
Form coloured compound
 - III Mempunyai takat lebur yang rendah
Has low melting point
 - IV Mempunyai lebih daripada satu nombor pengoksidaan
Has more than one oxidation number
- 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

7. Jadual 2 menunjukkan nombor proton bagi unsur-unsur W, X, Y dan Z.
Table 2 shows the proton number of elements W, X, Y and Z.

Unsur <i>Element</i>	W	X	Y	Z
Nombor proton <i>Proton number</i>	3	6	11	12

Jadual 2 / Table 2

Susunan manakah menunjukkan saiz atom unsur-unsur dalam tertib menurun?
Which arrangement shows the atomic size of the elements in descending order?

- A Z, Y, X, W
B W, X, Y, Z
C X, W, Z, Y
D Y, Z, W, X
8. Sebatian manakah yang terbentuk melalui pemindahan elektron?
Which compound is formed by transferring electrons?
- A Oksigen, O_2
Oxygen, O_2
B Natrium oksida, Na_2O
Sodium oxide, Na_2O
C Karbon dioksida, CO_2
Carbon dioxide, CO_2
D Hidrogen peroksida, H_2O_2
Hydrogen peroxide, H_2O_2

9 Jadual 3 menunjukkan susunan elektron bagi unsur Y dan unsur Z.
 Table 3 shows the electron arrangement of element Y and element Z.

Unsur Y <i>Element Y</i>	Unsur Z <i>Element Z</i>
2.4	2.6

Jadual 3 / Table 3

Apakah formula dan jenis ikatan bagi sebatian yang terbentuk daripada tindak balas antara Y dan Z?

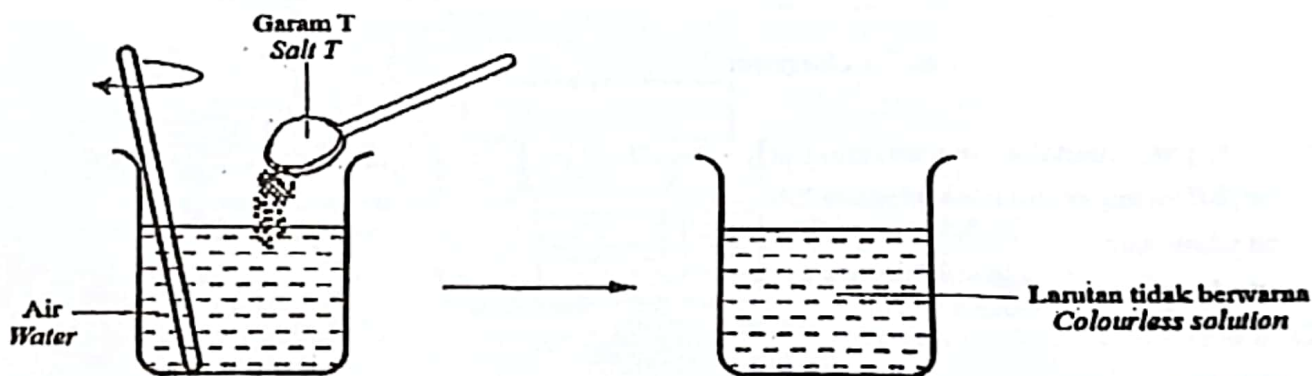
What is the formula and the type of bond of the compound formed from the reaction between Y and Z?

	Formula <i>Formula</i>	Jenis ikatan <i>Type of bond</i>
A	YZ_2	Kovalen <i>Covalent</i>
B	YZ_2	Ionik <i>Ionic</i>
C	Y_2Z	Kovalen <i>Covalent</i>
D	Y_2Z	Ionik <i>Ionic</i>

10. Pasangan asid yang manakah diklasikan dengan betul?
Which pair of acids is classified correctly?

	Asid monoprotik <i>Monoprotic acid</i>	Asid dwiprotik <i>Diprotic acid</i>
A	Asid etanoik <i>Ethanoic acid</i>	Asid hidroklorik <i>Hydrochloric acid</i>
B	Asid hidroklorik <i>Hydrochloric acid</i>	Asid etanoik <i>Ethanoic acid</i>
C	Asid sulfurik <i>Sulphuric acid</i>	Asid nitrik <i>Nitric acid</i>
D	Asid nitrik <i>Nitric acid</i>	Asid sulfurik <i>Sulphuric acid</i>

11. Rajah 2 menunjukkan garam T ditambah ke dalam air.
Diagram 2 shows salt T is added into the water.

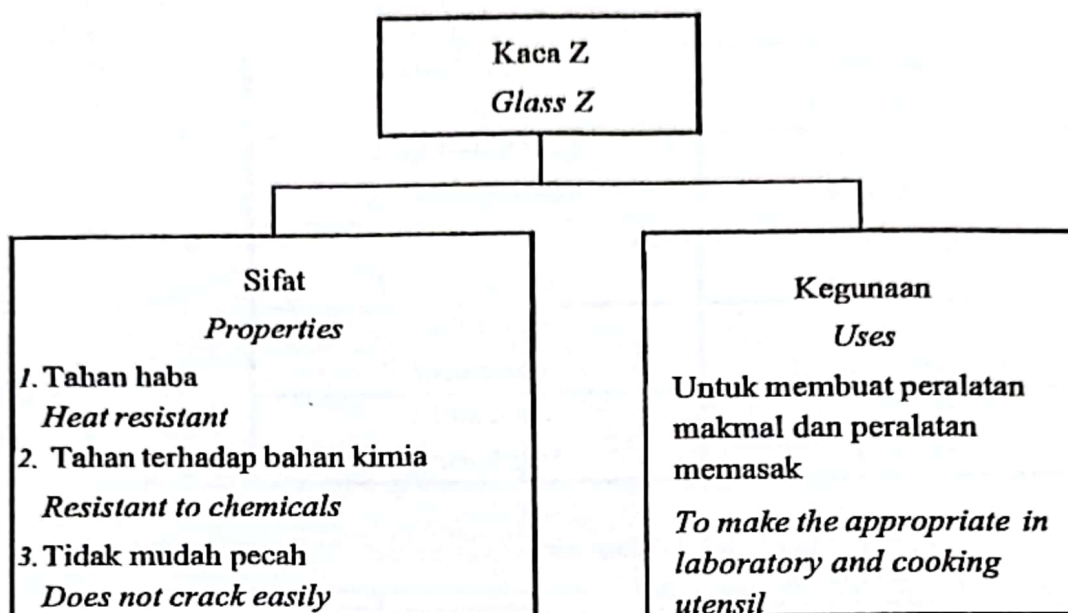


Rajah 2 / Diagram 2

Apakah garam T?
What is salt T?

- A Ferum(II) sulfat
Iron(II) sulphate
- B Natrium klorida
Sodium chloride
- C Kuprum(II) nitrat
Copper(II) nitrate
- D Kalsium karbonat
Calcium carbonate

- 12 Rajah 3 menunjukkan sifat dan kegunaan kaca Z.
Diagram 3 shows the properties and the uses of glass Z.



Rajah 3 / Diagram 3

Antara berikut, yang manakah merupakan jenis kaca Z?

Which of the following is the type of glass Z?

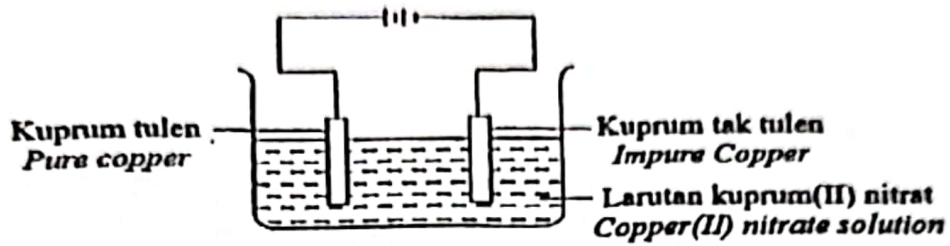
- A Kaca plumbum
Lead glass
- B Kaca borosilikat
Borosilicate glass
- C Kaca soda kapur
Soda lime glass
- D Kaca silika terlakur
Fused silica glass

- 13 Apakah maksud pengoksidaan?
What is the meaning of oxidation?

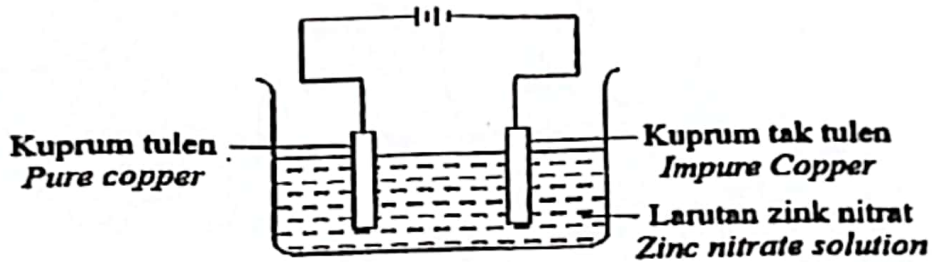
- A Hilang elektron
Loss of electron
- B Hilang oksigen
Loss of oxygen
- C Terima hidrogen
Gain of hydrogen
- D Pengurangan nombor pengoksidaan
Decrease in oxidation number

14. Manakah susunan radas yang betul untuk menuliskan logam kuprum?
Which apparatus set-up is correct to purify copper metal?

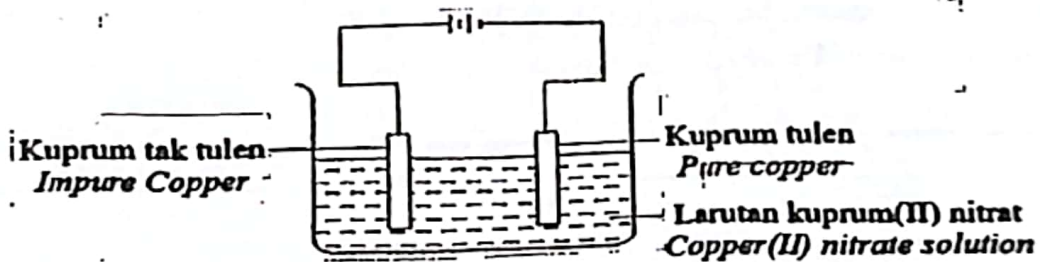
A



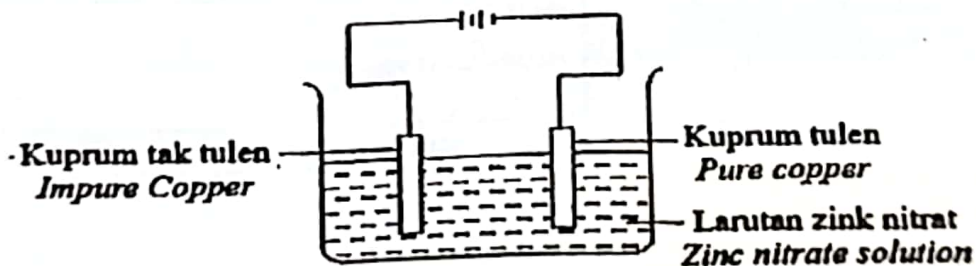
B



C

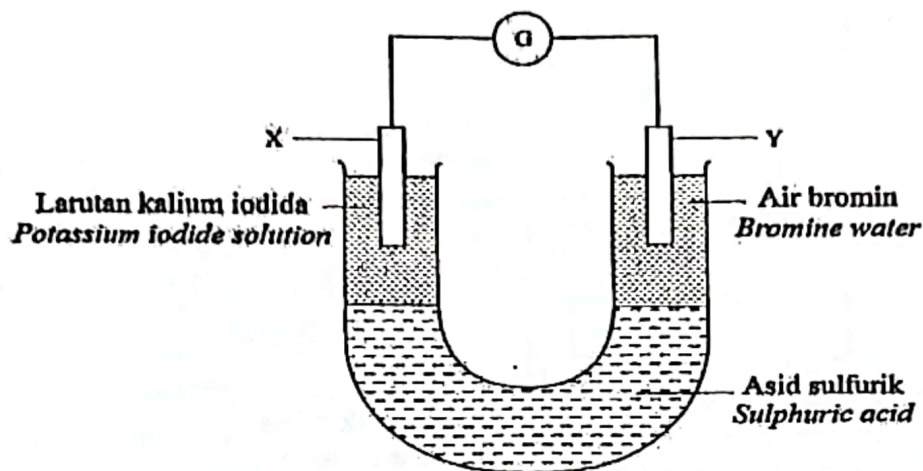


D



5 Rajah 4 menunjukkan susunan radas untuk mengkaji pemindahan elektron pada suatu jarak.

Diagram 4 shows the apparatus set-up to study the transfer of electron at a distance.



Rajah 4 / Diagram 4

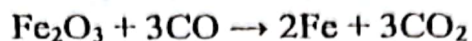
Antara yang berikut, yang manakah berlaku di X dan Y?

Which of the following occur at X and Y?

	X	Y
A	Jisirn X bertambah <i>Mass of X increases</i>	Jisirn Y berkurang <i>Mass of Y decreases</i>
B	Ion iodida dioksidakan <i>Iodide ion is oxidised</i>	Bromin diturunkan <i>Bromine is reduced</i>
C	Larutan perang menjadi tidak berwarna <i>Brown solution turns colourless</i>	Tiada perubahan warna <i>No change in colour</i>
D	Nombor pengoksidaan iodin berubah dari 0 ke +2 <i>Oxidation number of iodine changes from 0 to +2</i>	Nombor pengoksidaan bromin berubah dari -1 ke 0 <i>Oxidation number of bromine changes from -1 to 0</i>

16. Persamaan berikut menunjukkan tindak balas antara ferum(III) oksida, Fe_2O_3 dengan karbon monoksida, CO .

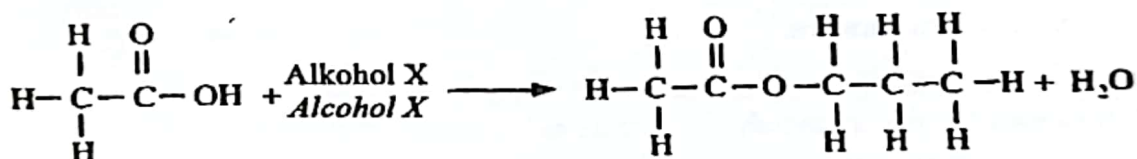
The following equation shows the reaction between iron(III) oxide, Fe_2O_3 with carbon monoxide, CO .



Antara berikut, yang manakah merupakan perubahan nombor pengoksidaan bagi ferum?

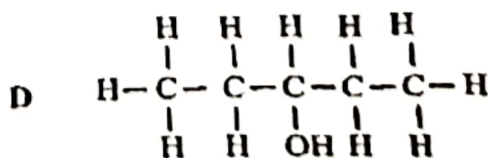
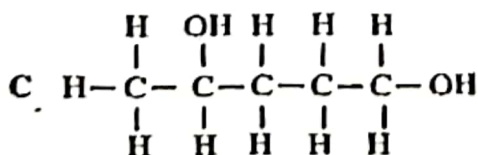
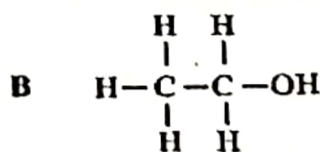
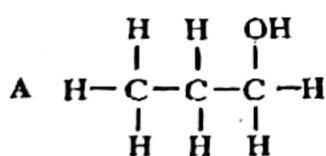
Which of the following is the change in the oxidation number of iron?

- A +3 \rightarrow 0
 B +2 \rightarrow +3
 C +3 \rightarrow +2
 D +2 \rightarrow 0
17. Persamaan mewakili satu tindak balas pengesteran.
The equation represents an esterification reaction.

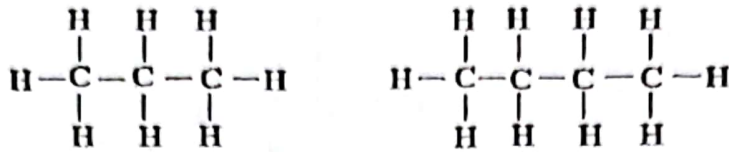


Apakah X?

What is X?



- 18 Berikut menunjukkan formula struktur bagi dua hidrokarbon.
The following shows the structural formulae of two hydrocarbons.



Sifat manakah yang sama bagi kedua-dua sebatian?

Which property of both compounds is similar?

- A Takat lebur
Melting point
- B Jisim molar
Molar mass
- C Keterlarutan
Solubility

- 19 Suatu bahan mempunyai ciri-ciri berikut.

A substance has the following characteristics.

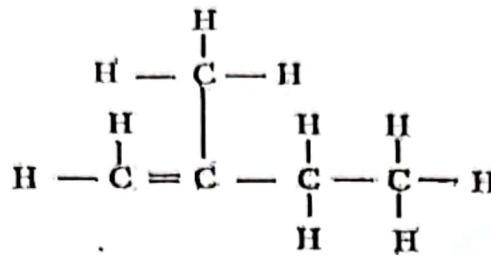
- Menukar kertas litmus biru lembap ke merah
Turns moist blue litmus paper to red
- Rasa masam
Sour taste
- Gelembung gas terbebas apabila bertindak balas dengan magnesium
Gas bubbles released when reacts with magnesium

Apakah formula molekul bagi bahan itu?

What is the molecular formula of the substance?

- A C_2H_6
- B $\text{C}_2\text{H}_5\text{OH}$
- C $\text{C}_2\text{H}_5\text{COOH}$
- D $\text{C}_2\text{H}_5\text{COOC}_2\text{H}_5$

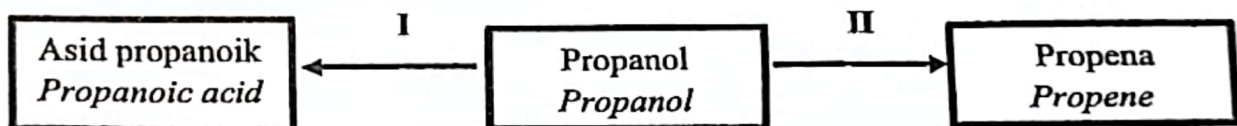
20. Rajah 5 menunjukkan formula struktur suatu sebatian organik.
Diagram 5 shows the structural formula of an organic compound.



Rajah 5 / Diagram 5

What is the IUPAC name of the organic compound?
Apakah nama IUPAC bagi sebatian organik itu?

- A 2-etilbut-3-ena
2-ethylbut-3-ene
- B 2-metilbut-2-ena
2-methylbut-2-ene
- C 2-metilbut-1-ena
2-methylbut-1-ene
- D 3-metilbut-3-ena
3-methylbut-3-ene
21. Rajah 6 menunjukkan satu tindak balas kimia.
Diagram 6 shows a chemical reaction.

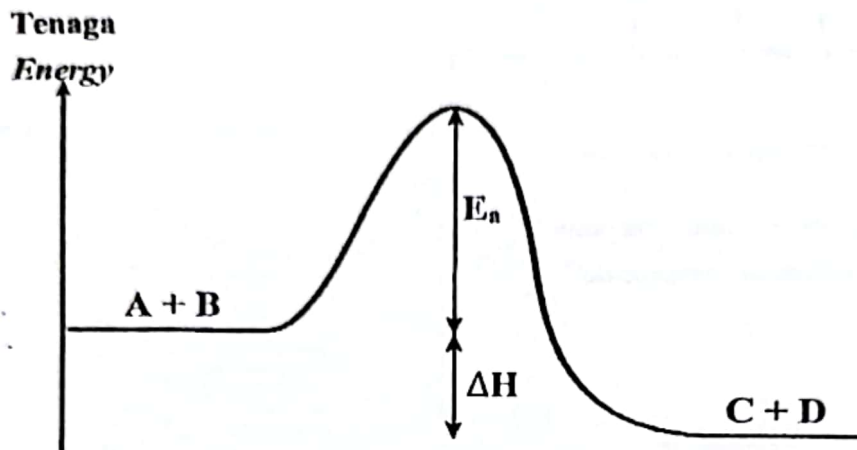


Rajah 6 / Diagram 6

Namakan tindak balas I dan II.
Name the reaction I and II.

	I	II
A	Pengoksidaan / <i>Oxidation</i>	Pendehidran / <i>Dehydration</i>
B	Pendehidran / <i>Dehydration</i>	Penghidrogenan / <i>Hydrogenation</i>
C	Pengoksidaan / <i>Oxidation</i>	Penukargantian / <i>Substitution</i>
D	Penambahan / <i>Addition</i>	Pendehidran / <i>Dehydration</i>

- 22 Rajah 7 menunjukkan gambar rajah profil tenaga bagi satu tindak balas eksotermik. Antara yang berikut, yang manakah betul tentang rajah tersebut?
Diagram 7 shows an energy profile diagram of an exothermic reaction. Which of the following is true about the diagram?

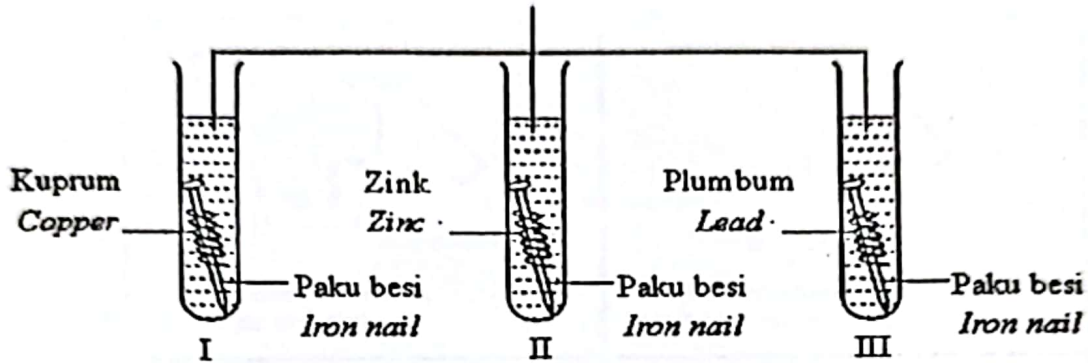


Rajah 7 / Diagram 7

- A C + D ialah bahan tindak balas
C + D are the reactants
- B A + B ialah hasil tindak balas
A + B are the products
- C E_a ialah tenaga pengaktifan
 E_a is activation energy
- D ΔH ialah haba yang diserap
 ΔH is heat is absorbed

23. Rajah 8 menunjukkan susunan radas untuk mengkaji kesan logam lain terhadap pengaratan besi.
 Diagram 8 shows the apparatus set-up to study the effect of other metals on the corrosion of iron.

Larutan agar-agar panas + fenolftalein + larutan kalium heksasianoferrat(III)
 Hot gelatin solution + phenolphthalein + potassium hexacyanoferrate(III) solution



Rajah 8 / Diagram 8

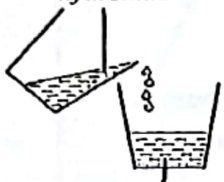
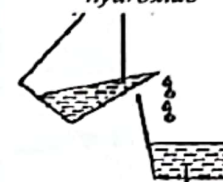
Dalam tabung uji manakah tompok biru dapat diperhatikan?
 In which test tube can the blue spot be observed?

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

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Jadual 4 menunjukkan haba peneutralan bagi tindak balas antara larutan natrium hidroksida, NaOH dengan asid monoprotik X dan asid monoprotik Y.

Table 4 shows the heat of neutralization for the reaction between sodium hydroxide solution, NaOH with monoprotic acid X and monoprotic acid Y.

Tindak balas Reaction	I	II
Bahan tindak balas Reactants	<p>25 cm³ natrium hidroksida 1.0 mol dm⁻³ 25 cm³ of 1.0 mol dm⁻³ sodium hydroxide</p>  <p>Asid monoprotik X Monoprotic acid X</p>	<p>25 cm³ natrium hidroksida 1.0 mol dm⁻³ 25 cm³ of 1.0 mol dm⁻³ sodium hydroxide</p>  <p>Asid monoprotik Y Monoprotic acid Y</p>
Haba peneutralan, kJ mol ⁻¹ Heat of neutralization, kJ mol ⁻¹	- 57.0	- 54.0

Jadual 4 / Table 4

Apakah asid monoprotik X dan asid monoprotik Y?

What is the monoprotic acid X and monoprotic acid Y?

	Asid monoprotik X Monoprotic acid X	Asid monoprotik Y Monoprotic acid Y
A	Asid nitrik Nitric acid	Asid fosforik Phosphoric acid
B	Asid etanoik Ethanoic acid	Asid sulfurik Sulphuric acid
C	Asid nitrik Nitric acid	Asid etanoik Ethanoic acid
D	Asid hidroklorik Hydrochloric acid	Asid nitrik Nitric acid

25. Polimer X merupakan satu polimer yang akan terurai apabila dipanaskan dan tidak dapat dikitar semula. Apakah jenis polimer X?
Polymer X is a polymer that will decompose when heated and cannot be recycled. What is the type of polymer X?
- A Polimer termoset
Thermosetting polymer
 - B Polimer elastomer
Elastomer polymer
 - C Polimer termoplastik
Thermoplastic polymer
26. Antara berikut yang mana merupakan saiz untuk zarah nano?
Which is true about the size of nanoparticles?
- A Kurang daripada 1 nm.
Less than 1 nm
 - B 1 nm hingga 100 nm
1 nm to 100 nm
 - C 100 nm hingga 1000 nm
100 nm to 1000 nm
 - D Lebih daripada 1000 nm.
More than 1000 nm

27

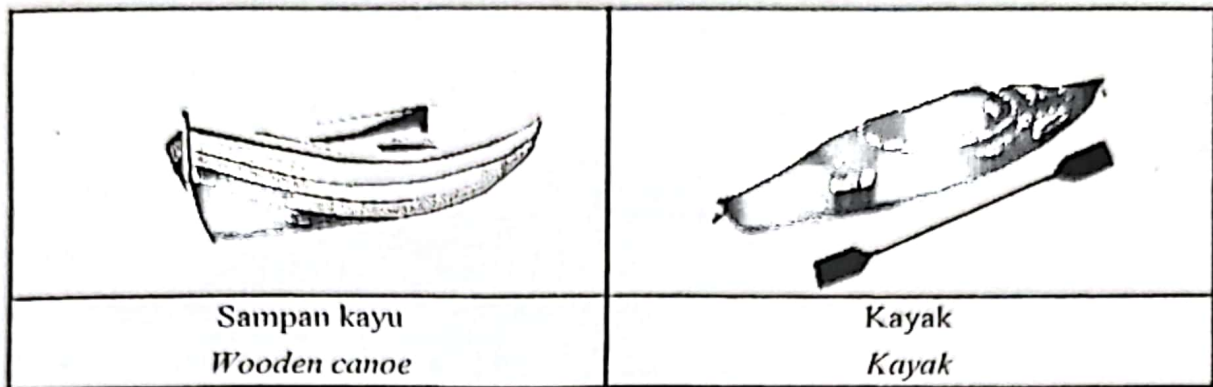
Antara yang berikut, yang manakah sifat yang betul bagi getah tervulkan dan getah tak tervulkan?

Which of the following are the correct properties for vulcanized rubber and unvulcanized rubber?

	Getah tervulkan <i>Vulcanized rubber</i>	Getah tak tervulkan <i>Unvulcanized rubber</i>
I	Kurang elastic <i>Less elastic</i>	Lebih elastik <i>More elastic</i>
II	Keras <i>Hard</i>	Lembut <i>Soft</i>
III	Menjadi melekit apabila dipanaskan <i>Become sticky when heated</i>	Tidak melekit apabila dipanaskan <i>Not sticky when heated</i>
IV	Tidak mudah teroksida <i>Not easily oxidized</i>	Mudah teroksida <i>Easily oxidized</i>

- 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

28. Rajah 9 menunjukkan sampan kayu dan kayak.
Diagram 9 shows wooden canoe and kayak.



Rajah 9 / Diagram 9

Antara pernyataan yang berikut, yang manakah menghuraikan perbezaan sifat sampankayu dengan kayak?

Which of the following statement describes the difference between the properties of a wooden canoe and a kayak?

- A Kayak lebih kuat dan mudah pecah
Kayak is stronger and easier to break
- B Kayak mempunyai kekuatan mampatan yang lebih tinggi
Kayak has higher compression strength
- C Kayak lebih ringan dan mudah dibentuk mengikut bentuk yang dikehendaki.
Kayak is lighter and easier to shape to the desired shape.
29. Krim anti penuaan dan anti kedut menggunakan kapsul nano liposom digunakan untuk menghantar protein dan nutrisi kepada kulit. Antara yang berikut yang manakah menerangkan tindakan ini?
Anti-aging and anti-wrinkle creams use nano liposome capsules to deliver proteins and nutrients to the skin. Which of the following explains how the action is carried out?
- A Zarah nano bergerak dengan mudah di antara zarah
Nanoparticles move easily between particles
- B Zarah nano mempunyai struktur pagar
Nanoparticles have a cage structure
- C Zarah nano memecahkan membran kulit
Nanoparticles break the skin membrane
- D Zarah nano mengoksidakan sel kulit
Nanoparticles oxidise skin cells

30

Parasetamol adalah satu analgesik untuk sakit kepala. Formula kimia bagi parasetamol ialah $C_8H_9NO_2$.

Berapakah jisim molekul relatif bagi parasetamol?

[Jisim atom relatif: H = 1; C = 12; N = 14; O = 16]

Paracetamol is an analgesic for headache. The chemical formula of paracetamol is $C_8H_9NO_2$. What is the relative molecular mass of paracetamol?

[Relative atomic mass: H = 1; C = 12; N = 14; O = 16]

- A 43
- B 63
- C 135
- D 151

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Apabila 9.2 g etanol terbakar dengan lengkap di dalam oksigen berlebihan, gas karbon dioksida dan air dihasilkan. Hitung jisim wap air yang dihasilkan.

When 9.2 g of ethanol burns completely in excess oxygen, carbon dioxide gas and water are produced. Calculate the mass of water vapour produced.

[Jisim atom relatif: H=1, C=12, O=16; Isi padu molar gas = $24 \text{ dm}^3 \text{ mol}^{-1}$ pada suhu bilik]

[Relative atomic mass: H=1, C=12, O=16; Molar volume of gas = $24 \text{ dm}^3 \text{ mol}^{-1}$ at room temperature]

- A 3.6 g
- B 4.8 g
- C 7.2 g
- D 10.8 g

32. Jadual 5 menunjukkan komposisi bagi asid P dalam cuka epal.
Table 5 shows the composition of acid P in apple cider vinegar.

Unsur <i>Element</i>	Jisim (g) <i>Mass (g)</i>
X	40.00
Y	6.67
Z	53.33

Jadual 5 / Table 5

Apakah formula molekul bagi asid P?

What is the molecular formula of acid P?

[Jisim atom relatif: $X = 12$, $Y = 1$, $Z = 16$; jisim molekul asid P = 60]

[*Relative atomic mass: $X = 12$, $Y = 1$, $Z = 16$; molecular mass of acid P = 60*]

- A XYZ
 B XY_2Z
 C X_2YZ_2
 D $X_2Y_4Z_2$
33. Pemerhatian berikut diperolehi apabila serbuk garam M dipanaskan:
The following observations are obtained when M salt powder is heated:

- Gas tidak berwarna terbebas mengeruhkan air kapur
A colourless gas released which turns limewater chalky
- Serbuk hijau menjadi hitam
The green powder turns black

Apakah garam M?

What is salt M?

- A Ferum(II) sulfat
Iron(II) sulphate
 B Kuprum(II) oksida
Copper(II) oxide
 C Ferum(II) karbonat
Iron(II) carbonate
 D Kuprum(II) karbonat
Copper(II) carbonate

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Sifat oksida-oksida unsur merentasi kala 3 dalam Jadual Berkala Unsur ditunjukkan dalam Jadual 6.

The properties of oxides of element across period 3 in Periodic Table of Elements are shown in Table 6.

Unsur Element	Keterlarutan oksida unsur dalam larutan natrium hidroksida <i>Solubility of element oxide in sodium hydroxide solution</i>	Keterlarutan oksida unsur dalam asid hidroklorik <i>Solubility of element oxide in hydrochloric acid</i>
P	Larut / <i>Soluble</i>	Larut / <i>Soluble</i>
Q	Tidak Larut / <i>Insoluble</i>	Larut / <i>Soluble</i>
R	Larut / <i>Soluble</i>	Tidak Larut / <i>Insoluble</i>

Jadual 6 / Table 6

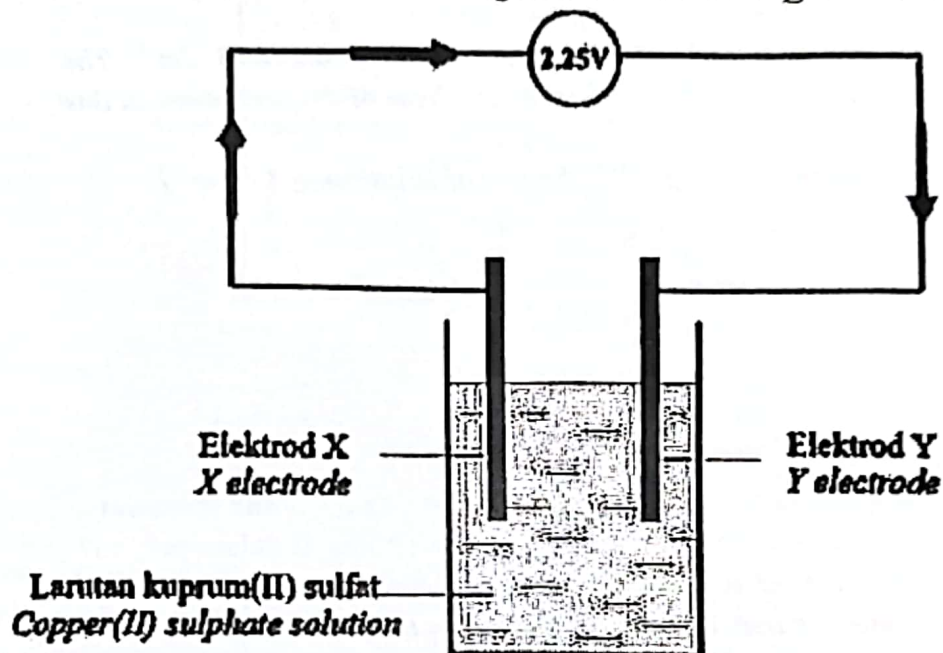
Apakah nombor proton yang mungkin bagi unsur P, Q dan R?

What is the possible proton number of element P, Q and R?

Nombor Proton / Proton number			
	P	Q	R
A	13	15	17
B	13	11	16
C	12	15	17
D	18	15	11

35. Rajah 10 menunjukkan sel voltan ringkas menggunakan logam P dan logam Q sebagai elektrod :

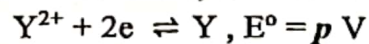
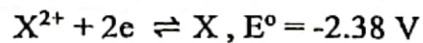
Diagram 10 shows a simple voltaic cell using metal P and metal Q as electrode :



Rajah 10 / Diagram 10

Keupayaan Elektrod Piawai:

Standard Electrode Potential:



Apakah nilai keupayaan elektrod piawai untuk logam Y?

What is the standard electrode potential value for metal Y?

- A - 0.13 V
- B - 4.63 V
- C + 0.13 V
- D + 4.63 V

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serbuk zink berlebihan ditambahkan kepada 25.0 cm^3 larutan argentum nitrat 0.8 mol dm^{-3} . Suhu campuran meningkat sebanyak $7.2 \text{ }^\circ\text{C}$. Hitungkan haba penyesaran dalam tindak balas ini.

[Muatan haba tentu larutan = $4.2 \text{ J g}^{-1} \text{ }^\circ\text{C}$, ketumpatan larutan = 1 g cm^{-3}]

Excess zinc is added into 20.0 cm^3 silver nitrate solution 0.1 mol dm^{-3} . The temperature of the mixture increases $7.2 \text{ }^\circ\text{C}$. Calculate the heat of displacement in this action.

[Specific heat capacity of solution = $4.2 \text{ J g}^{-1} \text{ }^\circ\text{C}$, density of solution = 1 g cm^{-3}]

- A - 21 kJ mol⁻¹
- B - 42 kJ mol⁻¹
- C - 37.8 kJ mol⁻¹
- D - 48.3 kJ mol⁻¹

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Atlet menggunakan pek yang mengandungi ammonium nitrat dan air untuk merawat kekejangan otot. Pernyataan manakah benar mengenai tindak balas di dalam pek itu?
Athletes use a pack which contains ammonium nitrate and water to treat muscle cramps. Which statement is true about the reaction in the pack?

- A Air menyerap tenaga haba
Water absorbs heat energy
- B Ion-ion bergerak lebih perlahan
The ions move slower
- C Tenaga haba dibebaskan ke persekitaran
Heat energy is lost to the surrounding
- D Tenaga haba diserap daripada persekitaran
Heat energy is absorbed from the surrounding

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Nilai bahan api arang kayu ialah 34 kJ g^{-1} .

Hitung jisim arang kayu yang diperlukan untuk mendidihkan 2.0 dm^3 air.

[Muatan haba tentu air = $4.2 \text{ J g}^{-1} \text{ }^\circ\text{C}$, ketumpatan air = 1 g cm^{-3} , suhu air pada keadaan bilik = $27 \text{ }^\circ\text{C}$]

The fuel value of charcoal is 34 kJ g^{-1} .

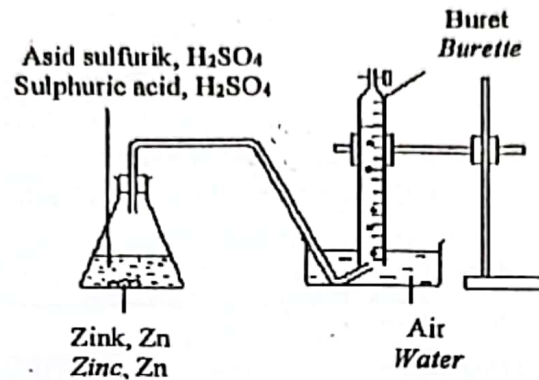
Calculate the mass of charcoal needed to boil 2.0 dm^3 water.

[Specific heat capacity of water = $4.2 \text{ J g}^{-1} \text{ }^\circ\text{C}$, density of water = 1 g cm^{-3} , temperature of water at room condition = $27 \text{ }^\circ\text{C}$]

- A 0.007 g
- B 0.018 g
- C 6.667 g
- D 18.000 g

39. Rajah 11 menunjukkan tindak balas antara zink dengan asid sulfurik bagi menentukan kadar tindak balas?

Diagram 11 shows the reaction between zinc and sulfuric acid to determine the rate of reaction?



Rajah 11 / Diagram 11

Antara yang berikut, perubahan yang manakah paling sesuai untuk menentukan kadar tindak balas dalam Rajah 11?

Which of the following change is most suitable to determine the rate of reaction in Diagram 11?

- A Pengurangan jisim zink terhadap masa
Decrease mass of zinc over time
- B Pembentukan mendakan terhadap masa
Formation of precipitate over time
- C Penambahan isipadu gas hidrogen yang terbebas terhadap masa
Increase volume of hydrogen gas released over time

Satu ujian dijalankan untuk mengesahkan ion-ion yang hadir dalam satu larutan garam. Jadual 7 menunjukkan pemerhatian bagi setiap ujian.

A series of tests are conducted to verify the ions present in a salt solution. Table 7 shows the observation for each test.

Ujian / Test	Pemerhatian / Observation
Tambah larutan natrium hidroksida secara berlebihan ke dalam larutan garam <i>Add excess sodium hydroxide solution into the salt solution</i>	Mendakan putih terbentuk dan larut dalam larutan natrium hidroksida yang berlebihan. <i>White precipitate formed and soluble in excess sodium hydroxide.</i>
Tambah 2 cm ³ asid nitrik diikuti dengan 2 cm ³ argentum nitrat ke dalam larutan garam <i>Add 2 cm³ nitric acid, follow by 2 cm³ silver nitrate into the salt solution</i>	Mendakan putih terbentuk <i>White precipitate is formed</i>

Jadual 7 / Table 7

Antara berikut, yang manakah larutan garam tersebut?

Which of the following is the salt solution?

- A Zink sulfat
Zinc sulphate
- B Magnesium klorida
Magnesium chloride
- C Plumbum(II) nitrat
Lead (II) nitrate
- D Aluminium klorida
Aluminium chloride

KERTAS SOALAN TAMAT
END OF QUESTION PAPER