

BAB 5 : AIR DAN LARUTAN
WATER AND SOLUTION

BAB 6 : ASID DAN ALKALI
ACIDS AND ALKALIS

BAHAGIAN A / SECTION A

- 1 Antara berikut, yang manakah sifat fizik air tulen?

Which of the following is the physical characteristic of pure water?

- A Takat didih air tulen ialah 0°C
The boiling point of pure water is 0°C
 B Takat beku air tulen ialah 100°C
The freezing point of pure water is 100°C
 C Air tulen tidak mempunyai warna
Pure water is colourless
 D Ketumpatan air tulen lebih rendah daripada alkohol
The density of pure water is lower than alcohol

- 2 Rajah menunjukkan perubahan keadaan jirim air.

Diagram shows the change in the state of water.



Apakah proses perubahan jirim yang berlaku?
What is the process of change in the state of matter?

- A Kondensasi
Condensation
 B Pendidihan
Boiling
 C Peleburan
Melting
 D Pemejalwapan
Sublimation

- 3 Kaedah pembersihan air yang manakah **tidak** membunuh mikroorganisma?
*Which water purification method does **not** kill microorganisms?*

- A Pendidihan
Boiling
 B Pengklorinan
Chlorination
 C Penurasan
Filtration
 D Penyulingan
Distillation

- 4 Ramalkan takat didih bagi kari ayam.
Predict the boiling point of chicken curry.

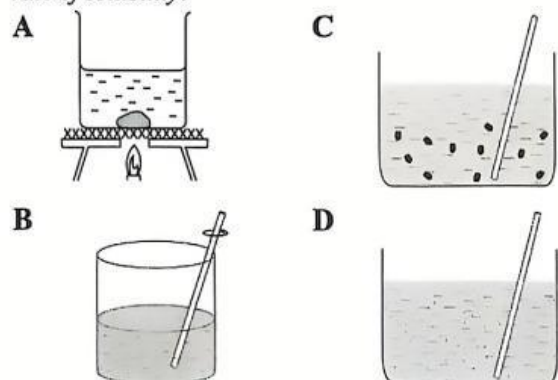
- A 0°C
 B 50°C
 C 100°C
 D 110°C

- 5 Antara berikut, yang manakah faktor yang mempengaruhi kadar penyejatan?
Which of the following are the factors affecting the rate of evaporation?

- I Suhu persekitaran
Surrounding temperature
 II Pergerakan udara
Air movement
 III Jenis jirim
Type of matter
 IV Saiz molekul
Size of molecule

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

- 6 Antara berikut, kaedah yang manakah **tidak** meningkatkan kadar keterlarutan suatu bahan?
*Which of the following methods does **not** increase the rate of solubility?*



- 7 Antara berikut, yang manakah contoh alkali?
Which of the following is an example of alkali?

- A Lemon
Lemon
 B Jus nanas
Pineapple juice
 C Cuka
Vinegar
 D Sabun mandi
Soap

- 8 Rajah menunjukkan satu campuran antara zat terlarut dan pelarut.
Diagram shows a mixture between solute and solvent.



Apakah jenis campuran tersebut?
What is the type of mixture?

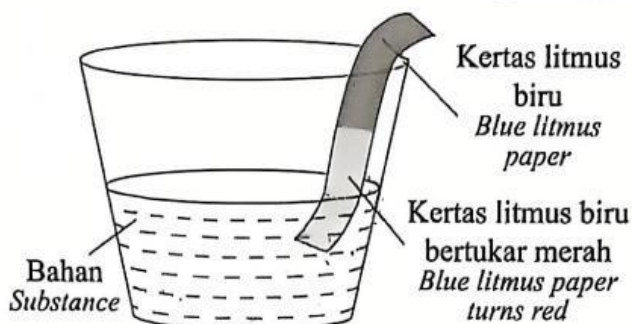
- A Koloid
Colloid
 - B Ampaian
Suspension
 - C Larutan cair
Dilute solution
 - D Larutan pekat
Concentrated solution
- 9 Apakah yang dimaksudkan dengan zat terlarut?
What is the meaning of solute?
- A Hasil campuran yang terbentuk apabila zat terlarut melarut di dalam pelarut
The mixture formed when a solute dissolves in a solvent
 - B Bahan yang boleh melarut di dalam cecair
A substance that can dissolve in a liquid
 - C Cecair yang boleh melarutkan bahan
A liquid that can dissolve a substance
 - D Larutan yang tidak boleh melarutkan bahan lagi
A solution that cannot dissolve any more substance
- 10 Apakah kepentingan kapur mati yang ditambah semasa proses pembersihan air?
What is the importance of adding slaked lime during the water purification process?
- A Membunuh mikroorganisma
Kill microorganisms
 - B Mengelakkan pereputan gigi
Prevent tooth decay
 - C Menambah kandungan oksigen di dalam air
Increase oxygen content in water
 - D Mengurangkan keasidan air
Reduce the acidity of water

- 11 Mengapakah baja kimia tidak digalakkan dalam pertanian?
Why is chemical fertiliser not recommended in agriculture?

- A Tanaman akan layu
Crop will wilt
- B Pencemaran udara
Air pollution
- C Pencemaran air
Water pollution
- D Pencemaran alam sekitar
Environmental pollution

- 12 Rajah menunjukkan satu aktiviti untuk menyiasat sifat suatu bahan.
Diagram shows an activity to investigate the property of a substance.

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Apakah sifat lain bagi bahan di atas?
What is the other property for the substance above?

What is the other property for the substance above?

- A Nilai pH lebih daripada 7
pH value more than 7
- B Tidak mengakis
Does not corrode
- C Rasa masam
Tastes sour
- D Tidak bertindak balas dengan logam
Does not react with metals

- 13 Apakah warna yang ditunjukkan oleh penunjuk semesta jika dicelup di dalam air?
What is the colour shown by universal indicator if it is dipped into the water?

- A Hijau
Green
- B Biru
Blue
- C Merah
Red
- D Tiada warna
Colourless

14 Antara berikut, tindak balas peneutralan yang manakah betul?

Which of the following neutralisation reactions is correct?

- A Asid nitrik + natrium hidroksida → natrium nitrat + air
Nitric acid + sodium hydroxide → sodium nitrate + water
- B Ferum (III) oksida + karbon → ferum + karbon dioksida
Iron (III) oxide + carbon → iron + carbon dioxide
- C Karbon dioksida + kalsium oksida → kalsium karbonat
Carbon dioxide + calcium oxide → calcium carbonate
- D Zink oksida + karbon → zink + karbon dioksida
Zinc oxide + carbon → zinc + carbon dioxide

15 Apakah kaedah yang digunakan dalam menjalankan tindak balas peneutralan?

What is the method used in carrying out neutralisation reaction?

- A Penyulingan
Distillation
- B Pentitratan
Titration
- C Pengekstrakan
Extraction
- D Pendidihan
Boiling