

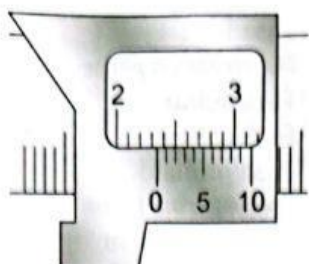
Ujian Akhir Sesi Akademik (UASA)

Bahagian A / Section A

(20 markah / 20 marks)

1. Rajah 1 menunjukkan bacaan angkup vernier semasa mengukur diameter sekeping duit syiling.

Diagram 1 shows the vernier caliper reading when measuring the diameter of a coin.



Rajah 1 / Diagram 1

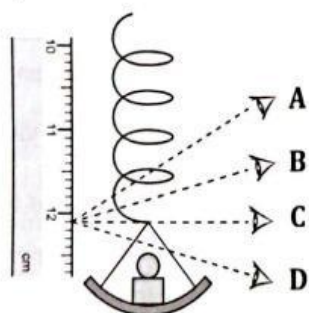
Berapakah diameter syiling tersebut?

What is the diameter of the coin?

- A 2.32 cm C 3.11 cm
B 2.97 cm D 3.20 cm

2. Rajah 2 menunjukkan kedudukan mata Andy semasa mengambil bacaan pemanjangan spring di dalam makmal.

Diagram 2 shows the position of Andy's eyes while taking spring extension readings in the laboratory.



Rajah 2 / Diagram 2

Antara kedudukan mata berikut, yang manakah betul supaya Andy dapat mengambil bacaan tanpa ralat paralaks?

Which of the following eye positions is correct so that Andy can take a reading without parallax error?

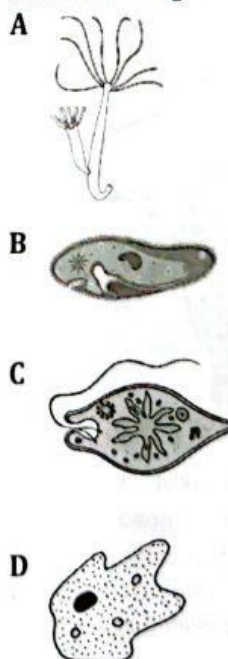
3. Antara yang berikut, yang manakah boleh dijumpai di dalam sel pipi manusia dan sel bawang?

Which of the following can be found in human cheek cells and onion cells?

- A Sitoplasma
Cytoplasm
B Dinding sel
Cell wall
C Vakuol
Vacuole
D Kloroplas
Chloroplast

4. Organisma manakah yang dikelaskan sebagai organisma multisel?

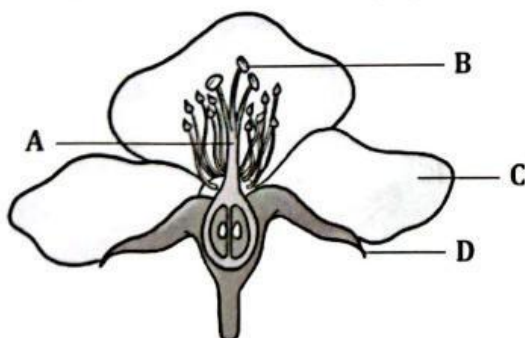
Which organism can be classified as a multicellular organism?



5. Antara yang berikut, yang manakah betul tentang kawal atur suhu badan manusia?
Which of the following are correct about the regulation of body temperature in humans?

	Suhu badan menurun Body temperature decreases	Suhu badan meningkat Body temperature increases
A	Bulu roma condong Hair lies flat	Bulu roma menegak Hair stands erect
B	Salur darah mengecut Blood vessel constricts	Salur darah mengembang Blood vessel dilates
C	Aktiviti otot rangka berkurang Skeletal muscles activities decrease	Aktiviti otot rangka bertambah Skeletal muscles activities increase
D	Metabolisme badan menurun Body metabolism decreases	Metabolisme badan meningkat Body metabolism increases

6. Rajah 3 menunjukkan struktur bunga.
Diagram 3 shows the structure of a flower.



Rajah 3 / Diagram 3

Antara yang berikut, yang manakah berfungsi untuk menarik perhatian agen pendebungaan seperti lebah?
Which of the following functioned to attract the attention of pollinating agents such as bees?

7. Maklumat berikut menerangkan tentang fasa X dalam kitar haid.
The following information describes phase X of the menstrual cycle.

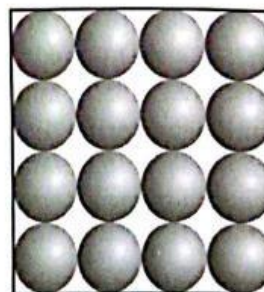
Salur darah pada dinding uterus mula terbentuk dan bersedia untuk menerima penempelan ovum yang telah disenyawakan.
Blood vessels in the uterine wall begin to form and are ready to receive the implantation of a fertilised ovum.

Apakah fasa X?

What is phase X?

- A Fasa haid
Menstruation phase
- B Fasa subur
Fertile phase
- C Fasa prahaid
Premenstrual phase
- D Fasa pemulihan
Repair phase

8. Rajah 4 menunjukkan susunan zarah bagi bahan Y.
Diagram 4 shows the particle arrangement for substance Y.



Rajah 4 / Diagram 4

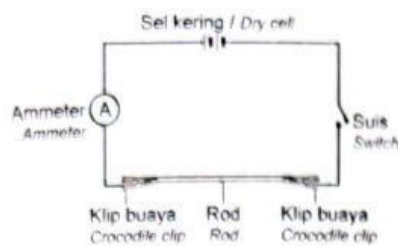
Antara yang berikut, yang manakah mungkin bahan Y?
Which of the following could be substance Y?

- I Susu
Milk
- II Kertas
Paper
- III Cincin
Ring
- IV Kicap
Soy sauce

- 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

9. Rajah 5 menunjukkan susunan radas untuk mengkaji sifat logam dan bukan logam.

Diagram 5 shows the arrangement of the apparatus to study the properties of metals and non-metals.



Rajah 5 / Diagram 5

Apakah sifat bahan yang ingin dikaji menggunakan kaedah ini?

What is the property studied by using this method?

- A Takat lebur
Melting point
 - B Kemuluran
Ductility
 - C Kebolehtempaan
Malleability
 - D Kekonduksian elektrik
Electrical conductivity
10. Antara campuran berikut, yang manakah boleh diasingkan melalui penurasan?
- Which of the following mixtures can be separated by filtration?*
- A Air dan pasir
Water and sand
 - B Air dan minyak
Water and oil
 - C Larutan gula
Sugar solution
 - D Pasir dan garam
Sand and salt

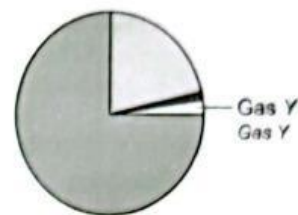
11. Antara yang berikut, yang manakah betul tentang kepentingan gas dalam kehidupan seharian?

Which of the following is correct about the importance of gas in daily life?

- A Oksigen digunakan dalam alat pemadam api
Oxygen is used in fire extinguishers
- B Gas neon digunakan dalam belon udara panas
Neon gas is used in hot air balloon
- C Nitrogen cecair digunakan sebagai agen penyejuk
Liquid nitrogen is used as cooling agent
- D Karbon dioksida digunakan untuk menyediakan sebatian
Carbon dioxide is used to prepare compound

12. Rajah 6 menunjukkan carta pai komposisi udara dalam atmosfera.

Diagram 6 shows a pie chart of the composition of air in the atmosphere.



Rajah 6 / Diagram 6

Antara yang berikut, yang manakah benar mengenai gas Y?

Which of the following is true about gas Y?

- A Gas Y tidak reaktif.
Gas Y is not reactive.
- B Gas Y menyokong pembakaran.
Gas Y supports combustion.
- C Gas Y menyalakan kayu lidi yang berbara.
Gas Y ignites the smoldering stick.
- D Gas Y menukarkan air kapur menjadi keruh.
Gas Y turns the limewater cloudy.

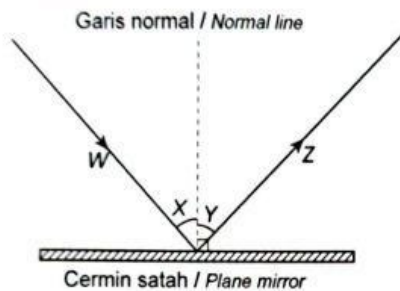
13. Antara langkah berikut, yang manakah membantu dalam mengurangkan pembebasan klorofluorokarbon ke dalam atmosfera?

Which of the following measures helps in reducing the release of chlorofluorocarbon into the atmosphere?

- A Menanam semula pokok
Replanting trees
- B Membuang sisa radioaktif dengan betul
Proper dispose of radioactive waste
- C Mengadakan program anti merokok
Organise anti-smoking campaigns
- D Membeli peti sejuk yang menggunakan hidroklorofluorokarbon (HCFC)
Buying a refrigerator that uses hydrochlorofluorocarbons (HCFCs)

14. Rajah 7 menunjukkan sinar pantulan cahaya pada cermin satah.

Diagram 7 shows the reflection of light on a plane mirror.



Cermin satah / Plane mirror

Rajah 7 / Diagram 7

Apakah bahagian berlabel Y?

What is the part labelled Y?

- A Sinar tuju
Incident ray
- B Sudut tuju
Angle of incidence
- C Sinar pantulan
Reflected ray
- D Sudut pantulan
Angle of reflection

15. Situasi yang manakah sesuai menggunakan cermin cekung?

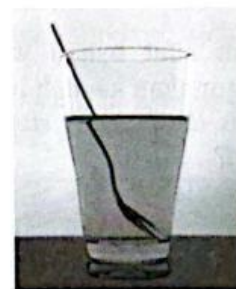
Which situation is suitable for using a concave mirror?

- I Doktor gigi memeriksa gigi pesakit
Dentist examines the patient's teeth
- II Nina bersolek sebelum pergi bekerja
Nina put on her make-up before going to work
- III Sue berlatih menari di dalam bilik
Sue practices dancing in a room
- IV Ahmad melihat cermin sisi kereta sebelum menukar laluan
Ahmad looked at the side mirror of the car before changing lanes

- 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

16. Rajah 8 menunjukkan suatu fenomena cahaya.

Diagram 8 shows a phenomenon of light.



Rajah 8 / Diagram 8

Pernyataan manakah yang benar tentang fenomena di atas?

Which statement is true about the phenomenon above?

- A Cahaya terpantul apabila memasuki air.
Light is reflected when entering water.
- B Cahaya berserakan apabila memasuki air.
Light is scattered when entering water.
- C Cahaya terbias apabila memasuki air.
Light is refracted when entering water.
- D Cahaya tersebar apabila memasuki air.
Light is dispersed when entering water.

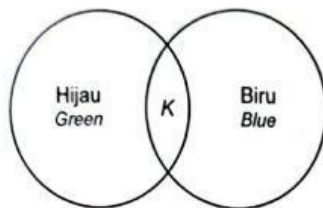
17. Mengapakah langit kelihatan biru pada waktu tengah hari?

Why does the sky look blue at noon?

- A Cahaya merah kurang diserak
The red light is less scattered
- B Cahaya matahari bersinar secara menegak
The sunlight shines vertically
- C Cahaya biru paling banyak diserak ke semua arah
The blue light is the most widely scattered in all direction
- D Lintasan cahaya melalui atmosfera adalah pendek
Light paths through the atmosphere are short

18. Rajah 9 menunjukkan penambahan dua warna primer.

Diagram 9 shows the addition of two primary colours.



Rajah 9 / Diagram 9

Apakah warna K yang terbentuk?
What is the colour of K that is produced?

- A Sian
Cyan
- B Putih
White
- C Kuning
Yellow
- D Magenta
Magenta

19. Rajah 10 menunjukkan sebuah satelit sedang mengorbit Bumi.

Diagram 10 shows a satellite orbiting the Earth.



Rajah 10 / Diagram 10

Apakah lapisan atmosfera di mana satelit komunikasi terletak?

What is the atmospheric layer in which communication satellites are located?

- A Eksosfera
Exosphere
- B Stratosfera
Stratosphere
- C Mesosfera
Mesosphere
- D Termosfera
Thermosphere

20. Antara aktiviti manusia berikut, yang manakah memelihara sistem air permukaan dan air bawah tanah?

Which of the following human activities preserve surface water and underground water?

- A Aktiviti penggalian di bawah tanah
Underground mining
- B Pembuangan sisa domestik dan sisa perindustrian ke dalam sungai
Discharge of domestic wastes and industrial wastes into the river
- C Penggunaan baja kimia untuk menggantikan baja organik
The usage of chemical fertilisers as a substitute for organic fertilisers
- D Mewujudkan hutan simpan
Establishing a reserved forest