

SET 1

PENTAKSIRAN PERTENGAHAN TAHUN

100
Markah

KERTAS/PAPER

I

Masa: 1 jam 15 minit
Time: 1 hour 15 minutes

40

Arahan: Pilih jawapan yang **betul** daripada **A, B, C dan D.**

Instructions: Choose the **correct** answer from options **A, B, C and D.**

- 1 Rajah 1 menunjukkan satu eksperimen yang dijalankan oleh Razin.
Diagram 1 shows an experiment carried out by Razin.



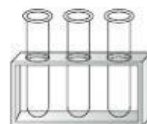
Rajah 1
Diagram 1

Mengapakah ikan di dalam bekas itu mati selepas satu hari?
Why does the fish in the container dies after one day?

- A Ikan tidak mendapat cahaya matahari
The fish does not get sunlight
 - B Ikan tidak mendapat udara
The fish does not get air
 - C Ikan tidak mendapat makanan
The fish does not get food
 - D Ikan tidak mendapat air
The fish does not get water
- 2 Antara berikut, yang manakah melibatkan kemahiran proses sains 'mengelas'?
Which of following involves the science process skill of 'classifying'?
- A Meramalkan keadaan cuaca hari esok
Predicting tomorrow's weather
 - B Mengukur ketinggian sepohon pokok
Measuring the height of a plant
 - C Membandingkan saiz anak pokok yang baru bercambah
Comparing the size of seedlings that have just germinated
 - D Membahagikan haiwan kepada dua kumpulan
Dividing animals into two groups

- 3 Antara radas sains berikut, yang manakah dilabelkan dengan betul?
Which of the following science apparatus is labelled correctly?

A



kelalang kon
conical flask

C



silinder penyukat
measuring cylinder

B



tabung uji
test tube

D



jam randik
stopwatch

- 4 Antara berikut, yang manakah merupakan alat pengukur yang paling sesuai untuk mengukur panjang dan lebar sebuah padang bola?
Which of following is the most suitable measuring tool to measure the length and the width of a football field?

- A Pita pengukur
Measuring tape
- B Pembaris
Ruler
- C Selinder penyukat
Measuring cylinder
- D Penyedut minuman
Straw

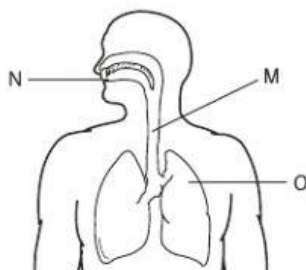
- 5 Rajah 2 menunjukkan secawan kopi panas.
KBAT Diagram 2 shows a cup of hot coffee.



Rajah 2
Diagram 2

Apakah yang akan berlaku apabila seketul ais dimasukkan ke dalam cawan itu?
What will happen when an ice cube is added into the cup?

- A Kopi menjadi sejuk dengan cepat
The coffee cools down very quickly
B Kopi menjadi lebih panas
The coffee becomes hotter
C Kopi menjadi beku
The coffee becomes freezes
D Tiada apa-apa perubahan yang berlaku
No changes happen
- 6 Antara berikut, organ yang manakah terlibat dalam proses pernafasan manusia?
Which of the following organs involved in the human breathing process?
- A Perut
Stomach
B Trakea
Trachea
C Ginjal
Kidneys
D Kulit
Skin
- 7 Rajah 3 menunjukkan organ-organ pernafasan manusia yang bertanda M, N dan O.
Diagram 3 shows the human breathing organs labelled M, N and O.



Rajah 3
Diagram 3

Urutan manakah yang betul bagi pengaliran udara semasa proses menghembus nafas?
Which is the correct sequence of the passage of air during exhalation process?

- A N → M → O
B N → O → M
C O → M → N
D M → N → O

- 8 Apakah yang berlaku semasa manusia menarik nafas?
What happens when human inhales?

- A Dada mengempis
The chest deflates
B Aliran udara keluar dari paru-paru
Air flows out of the lungs
C Saiz dada mengembang
The size of the chest increases
D Dada turun ke bawah
The chest moves downwards

- 9 Maklumat berikut menunjukkan beberapa jenis aktiviti.
The following information shows a few activities.

W – Bermain bola sepak
Playing football
X – Membaca majalah
Reading magazine
Y – Bermain permainan video
Playing video game
Z – Tidur
Sleep

Susun semula urutan aktiviti berdasarkan kadar pernafasan yang semakin meningkat.
Rearrange the above activities in the order of increasing breathing rate.

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

- 10 Antara berikut, aktiviti yang manakah mempunyai kadar pernafasan yang paling rendah?
Which of the following activities has the lowest breathing rate?

A



C



B



D



- 11 Kulit merupakan salah satu organ yang terlibat dalam proses perkumuhan.
Skin is one of the organs involves in the excretion process.

Antara berikut, yang manakah bahan yang disingkirkan oleh kulit?

Which of the following is excreted by the skin?

- A Peluh
Sweat
- B Air kencing
Urine
- C Wap air
Water vapour
- D Najis
Faeces

- 12 Rajah 4 menunjukkan satu aktiviti manusia.
Diagram 4 shows a human activity.



Rajah 4
Diagram 4

Organ perkumuhan yang manakah aktif semasa aktiviti di atas?
Which excretory organs are active during the above activity?

- A Kulit dan perut
Skin and stomach
- B Mulut dan perut
Mouth and stomach
- C Jantung dan ginjal
Heart and kidneys
- D Kulit dan paru-paru
Skin and lungs

- 13 Antara berikut yang manakah merupakan organ perkumuhan?
Which of the following are the excretory organs?

- A Jantung, paru-paru dan kulit
Heart, lungs and skin
- B Jantung, ginjal dan paru-paru
Heart, kidneys and lungs
- C Ginjal, paru-paru dan kulit
Kidneys, lungs and skin
- D Jantung, kulit dan paru-paru
Heart, skin and lungs

- 14 Apakah yang dimaksudkan dengan proses penyahtinjaan?

What is the meaning of defecation process?

- A Proses menyingkirkan bahan toksik daripada badan
The process of removing toxic materials from the body
- B Proses menyingkirkan bahan buangan daripada badan
The process of removing waste products from the body
- C Proses menyingkirkan makanan yang tidak dicerna daripada badan
The process of removing undigested food from the body
- D Proses menghasilkan karbon dioksida
The process of produce carbon dioxide

- 15 Maklumat berikut menunjukkan proses-proses dalam kehidupan manusia.
The following information shows the life processes of human.

Proses Process	Organ Organs
Pernafasan <i>Breathing</i>	Trakea dan paru-paru <i>Trachea and lungs</i>
Perkumuhan <i>Excretion</i>	Kulit dan ginjal <i>Skin and kidneys</i>
Penyahtinjaan <i>Defecation</i>	X

Apakah organ X?
What is organ X?

- A Hidung
Nose
- B Perut
Stomach
- C Usus besar
Large intestine
- D Jantung
Heart

- 16 Rajah 5 menunjukkan sejenis gerak balas.
KBAT *Diagram 5 shows a type of response.*



Rajah 5
Diagram 5

Antara berikut, yang manakah mungkin menyebabkan gerak balas seperti di atas?
Which of the following is likely the cause of the above response?

- A Terhidu bau makanan yang sedap
Smelling delicious food
- B Bermain bola sepak
Playing football
- C Minum minuman yang masam
Drinking sour drink
- D Menghiris bawang
Slicing onion

17 Antara yang berikut, manakah bahan buangan yang disingkirkan daripada penyahtinjaan?
Which of the following is the waste product removed by defecation?

- A Peluh
Sweat
- B Air kencing
Urine
- C Wap air
Water vapour
- D Najis
Faeces

18 Antara berikut, yang manakah gerak balas apabila seseorang terpijak paku?
Which of the following is the response of a person when he accidentally steps on a nail?

- A Melompat lebih tinggi
Jumps upwards
- B Angkat kaki serta merta
Lift the foot immediately
- C Ketawa
Laugh
- D Tidak berbuat apa-apa
Does nothing

19 Apakah organ pernafasan yang membolehkan haiwan bernafas di darat dan di dalam air?
What breathing organs allow animal to breathe on land and in water?

- A Peparu dan insang
Lungs and gills
- B Spirakel dan kulit lembap
Spiracles and moist skin
- C Kulit lembap dan peparu
Moist skin and lungs
- D Insang dan spirakel
Gills and spiracles

20 Pasangan haiwan yang manakah mempunyai organ pernafasan di bahagian abdomen?

Which pairs of animals have their breathing organs at the abdomen part?

- A Semut dan pepatung
Ant and dragonfly
- B Beluncas dan berudu
Caterpillar and tadpole
- C Penyu dan rama-rama
Turtle and butterfly
- D Lipas dan cacing tanah
Cockroach and earthworm

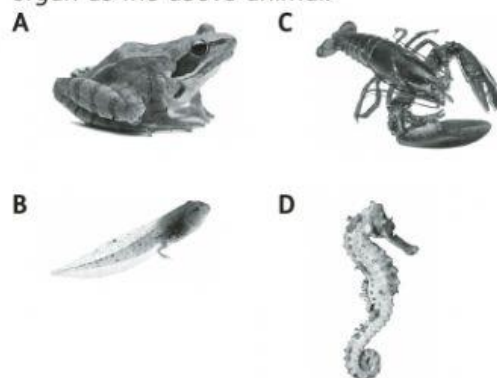
21 Rajah 6 menunjukkan seekor haiwan.
Diagram 6 shows an animal.



Rajah 6
Diagram 6

Haiwan manakah yang mempunyai organ pernafasan yang sama dengan haiwan di atas?

Which animal has the same breathing organ as the above animal?



22 Maklumat berikut menunjukkan organ pernafasan haiwan.
The following information shows the breathing organs of animals.

Haiwan Animals	Organ pernafasan Breathing organs
Lintah Leech	Kulit lembap Moist skin
Ikan lumba-lumba Dolphin	Peparu Lungs
M	Spirakel Spiracles

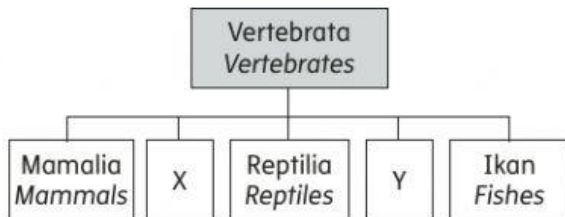
Apakah nama haiwan M?
What is the name of animal M?

- A Ular Snake
B Katak Frog
C Ketam Crab
D Semut Ant

23 Antara berikut, yang manakah betul mengenai salamander?
Which of the following is correct about the salamander?

- A Boleh hidup di darat dan di dalam air
Can live on land and in water
B Kulitnya perlu sentiasa berkeadaan lembap
Its skin needs to be constantly moist
C Boleh berfungsi di darat sahaja
Can function on land only
D Mempunyai organ pernafasan seperti berudu
Has similar breathing organ as a tadpole

24 Rajah 7 menunjukkan klasifikasi haiwan vertebrata.
Diagram 7 shows classification of vertebrates.

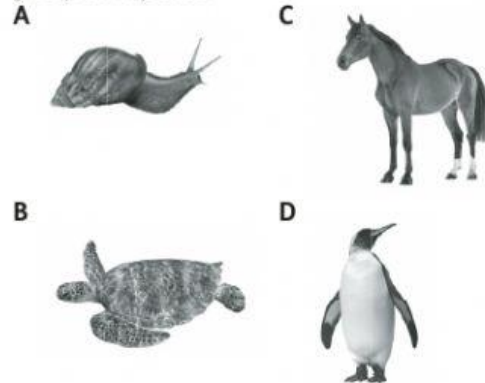


Rajah 7
Diagram 7

Apakah contoh haiwan X dan Y?
What is an example of animal X and Y?

	X	Y
A	Beruang Bear	Ular Snake
B	Burung hantu Owl	Ikan jerung Shark
C	Buaya Crocodile	Ketam Crab
D	Burung murai Magpie	Katak Frog

25 Antara berikut, yang manakah merupakan haiwan daripada kumpulan reptilia?
Which of the following is an animal from a group of reptiles?



26 Maklumat yang berikut menunjukkan ciri-ciri sepunya haiwan invertebrata.
The following information shows the common characteristics of invertebrate animals.

- Tidak mempunyai tulang belakang
Do not have a backbone
- Berdarah sejuk
Cold-blooded
- Mempunyai cengkerang yang keras
Have a hard shell

Antara berikut, haiwan manakah yang mempunyai ciri-ciri yang sama seperti di atas?

Which of the following animals has the same characteristics as above?

- A Cacing tanah Worm
B Kura-kura Turtle
C Obor-obor Jellyfish
D Salamander Salamander

27 Rajah 8 menunjukkan seekor haiwan invertebrata.
Diagram 8 shows an invertebrate animal.



Rajah 8
Diagram 8

Apakah fungsi bahagian X?
What is the function of part X?

- A Untuk bernafas
To breathe

- B Untuk membiak
To reproduce
- C Untuk berkumuh
To excrete
- D Untuk melindungi diri
To protect itself

28 Maklumat berikut menunjukkan bahagian tumbuhan dan rangsangannya.
The following information shows part of a plant and its stimulus.

Bahagian tumbuhan Part of plant	Rangsangan Stimulus
Daun Leaf	Sentuhan Touch
Akar Root	X

- J Graviti
Gravity
- K Cahaya matahari
Sunlight
- L Air
Water
- M Udara
Air

Apakah rangsangan X?
What is stimuli X?

- A J dan M
J and M
- B K dan L
K and L
- C J dan L
J and L
- D K dan M
K and M

29 Nadia meletakkan pasu bunga di tepi tingkap dapurnya. Selepas beberapa minggu, dia mendapati pokok bunga tersebut telah bengkok ke arah tingkap.
Nadia placed a potted plant near the window of her kitchen. After a few weeks, she noticed that the plant has bent towards the windows.

Apakah kesimpulan yang dapat dibuat dalam situasi di atas?
What conclusion can be made from the above situation?

- A Tumbuhan boleh membuat makanannya sendiri
Plant can make its own food

- B Tumbuhan tidak suka kegelapan
Plant dislike darkness
- C Tumbuhan memerlukan udara segar
Plant requires fresh air
- D Bahagian tertentu tumbuhan dapat bergerak balas terhadap rangsangan
Certain parts of a plant can respond to stimuli

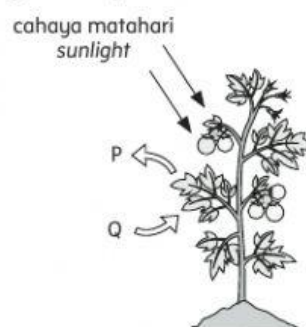
30 Antara berikut, yang manakah **bukan** rangsangan terhadap tumbuhan?
Which of the following is **not** the plant stimulus?

- A Cahaya
Light
- B Sentuhan
Touch
- C Graviti
Gravity
- D Udara
Air

31 Antara pernyataan berikut, yang manakah **tidak** betul tentang proses fotosintesis?
Which of the following statements is **not** correct about photosynthesis process?

- A Proses tumbuhan menghasilkan makanan sendiri
The plants process their own food
- B Memerlukan kanji
Requires starch
- C Memerlukan cahaya matahari dan klorofil
Requires sunlight and chlorophyll
- D Membebaskan gas oksigen
Release the oxygen

32 Rajah 9 menunjukkan pertukaran gas yang berlaku semasa tumbuhan sedang menjalankan proses fotosintesis.
Diagram 9 shows the gas exchange that happens when a plant is carrying out photosynthesis process.



Rajah 9
Diagram 9

Apakah gas P berdasarkan rajah di atas?
What is gas P based on the above diagram?

- A Oksigen
Oxygen
- B Karbon dioksida
Carbon dioxide
- C Hidrogen
Hydrogen
- D Wap air
Water vapour

33 Fatimah membeli sepasu pokok bunga matahari dari sebuah kedai bunga. Selepas dua hari, dia mendapati pokok bunga tersebut menjadi layu. Antara berikut, yang manakah dapat menjadikan pokok bunga itu sihat semula?
Fatimah bought a potted sunflower from a nursery. After two days, she noticed that the sunflower had become wilted. Which of the following ways can make the sunflower healthy again?

- A Tambahkan tanah ke dalam pasu itu
Add more soil into the pot
- B Letakkan baja kepada pokok bunga matahari itu
Put some fertilizer to the sunflower plant
- C Siram pokok bunga matahari itu
Water the sunflower plant
- D Dedahkan pokok bunga matahari itu kepada cahaya matahari
Expose the sunflower plant to sunlight

34 Rajah 10 menunjukkan sejenis tumbuhan.
Diagram 10 shows a type of plant.



Rajah 10
Diagram 10

Mengapakah tumbuhan di atas tidak menjalankan proses fotosintesis?
Why the plant above does not carry out photosynthesis process?

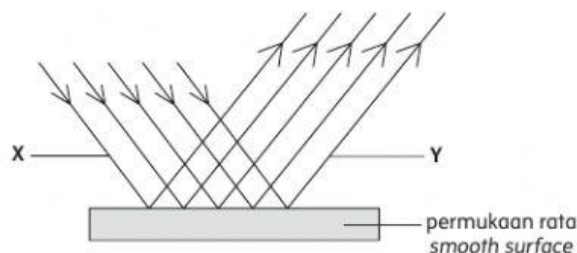
- A Kerana ia tidak mempunyai daun
Because it does not have leave
- B Kerana ia tidak mempunyai batang
Because it does not have stem
- C Kerana ia tidak mempunyai klorofil
Because it does not have chlorophyll
- D Kerana ia tidak mempunyai akar
Because it does not have root

35 Antara berikut, yang manakah adalah sifat cahaya?
Which of the following are the characteristics of light?

- P – Cahaya bergerak lurus
Light travels in a straight line
- Q – Cahaya tidak boleh dibiaskan
Light cannot be refracted
- R – Cahaya boleh dipantulkan
Light can be reflected
- S – Cahaya boleh menembusi objek legap
Light can pass through an opaque

- A P dan Q
P and Q
- B P dan R
P and R
- C R dan S
R and S
- D P dan S
P and S

36 Rajah 11 menunjukkan suatu pantulan cahaya.
Diagram 11 shows the reflection of light



Rajah 11
Diagram 11

Apakah sinar yang berlabel X dan Y di atas?
What are the rays labeled X and Y above?

	X	Y
A	Sinar tuju Incident ray	Sinar pantulan Reflected ray
B	Sinar pantulan Reflected ray	Sinar tuju Incident ray
C	Sudut tuju Angle of incident	Sudut pantulan Angle of reflection
D	Sudut pantulan Angle of reflection	Sudut tuju Angle of incident

- 37 Rajah 12 menunjukkan imej sebuah jag yang terbentuk di dalam cermin.
Diagram 12 shows the image of a jug formed in a mirror.

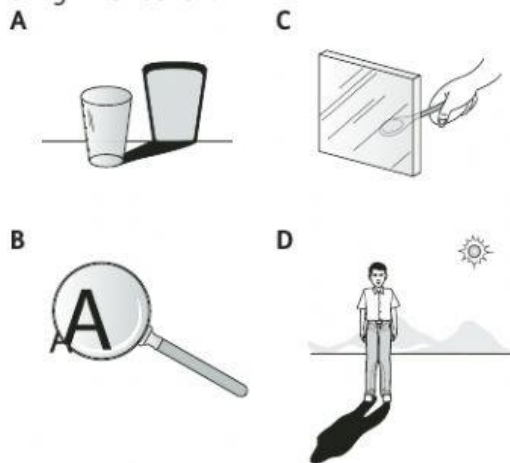


Rajah 12
Diagram 12

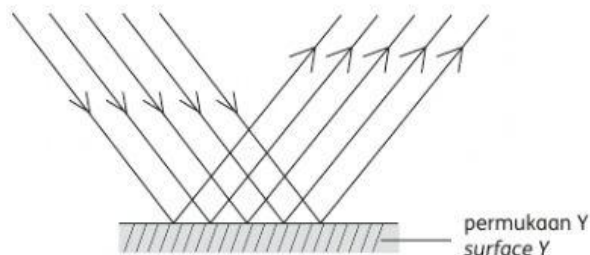
Mengapakah imej jag itu boleh terbentuk di dalam cermin?
Why is the image of the jug formed in the mirror?

- A Cahaya dipantulkan
Light is reflected
- B Cahaya bergerak semua arah
Light travels in all directions
- C Cahaya dibiaskan
Light is refracted
- D Cahaya bergerak lurus
Light travel in a straight line

- 38 Antara berikut, yang manakah menunjukkan prinsip pembiasan cahaya?
Which of the following shows the principle of light refraction?



- 39 Rajah 13 menunjukkan pantulan cahaya yang terhasil daripada permukaan Y.
Diagram 13 shows the reflection of light from surface Y.



Rajah 13
Diagram 13

Berdasarkan rajah di atas, apakah permukaan Y?
Based on the diagram above, what is a surface Y?

- A Kertas pasir
Sand paper
- B Kaca lutsinar
Transparent glass
- C Cermin
Mirror
- D Batu
Stone

- 40 Rajah 14 menunjukkan penyedut minuman yang diletakkan di dalam segelas air.
Diagram 14 shows a drinking straw placed in a glass of water.



Rajah 14
Diagram 14

Mengapakah penyedut minuman itu kelihatan bengkok di dalam air?
Why is the drinking straw looks bent in the water?

- A Pantulan cahaya
Reflection of light
- B Pembiasan cahaya
Refraction of light
- C Cahaya tidak menembusi air
Light cannot pass through water
- D Cahaya bergerak lurus
Light travels in a straight line

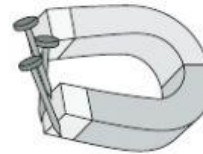
KERTAS SOALAN TAMAT
END OF QUESTION PAPER

Arahan: Tulis jawapan kamu dalam ruang yang disediakan.
Instructions: Write your answers in the spaces provided.

- 1 Rajah 1.1 menunjukkan satu penyiasatan dengan menggunakan magnet.

Diagram 1.1 shows an investigation using magnets.

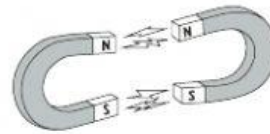
- (a) Berdasarkan Rajah 1.1, nyatakan **satu** pemerhatian.
Based on Diagram 1.1, state **one** observation.



Rajah 1.1
Diagram 1.1

(1 markah/mark)

- (b) (i) Berdasarkan Rajah 1.2, apakah yang akan berlaku jika kedua-dua magnet itu didekatkan?
Based on Diagram 1.2, what will happen if both magnets are brought close together?



Rajah 1.2
Diagram 1.2

Tandakan (✓) pada jawapan yang betul.
Tick (✓) to the correct answer

Kedua-dua magnet itu akan menarik antara satu sama lain. Both magnets will attract each other.	
Kedua-dua magnet itu akan menolak antara satu sama lain. Both magnets will repel each other.	
Tiada apa yang berlaku pada kedua-dua magnet itu. Nothing happens to both magnets.	

(1 markah/mark)

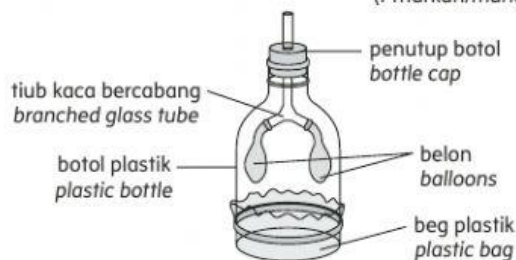
- (ii) Berikan **satu** sebab bagi jawapan kamu di (b)(i).
Give **one** reason for your answer in (b)(i).

(1 markah/mark)

- (c) Berikan **satu** contoh bahan yang tidak dapat ditarik oleh magnet.
Give **one** example of substance that is not attracted to a magnet.

(1 markah/mark)

- 2 Rajah 2.1 menunjukkan sebuah alat yang dicipta oleh Dewi untuk menggambarkan satu proses hidup manusia.
Diagram 2.1 shows a device created by Dewi to demonstrate a life process of humans.



Rajah 2.1
Diagram 2.1

- (a) (i) Apakah proses hidup manusia yang digambarkan oleh Dewi?
What is the life process of humans that is being demonstrated by Dewi?

(1 markah/mark)