

**SCIENCE YEAR 4
PAPER 2
(40 marks)**

Name: Class:..... Date:.....

**Answer all questions.
Jawab semua soalan.**

1. Diagram below shows a situation occurred to a pupil while she is in the Science room.
Rajah di bawah menunjukkan situasi yang berlaku kepada seorang murid semasa dia berada di bilik Sains.



- (a) What is the action that needs to be taken by the pupil?
Apakah tindakan yang perlu dilakukan oleh murid itu?

_____ [1 mark/markah]

- (b) State your reason based on your answer in 1(a).
Nyatakan alasan kamu berdasarkan jawapan di 1(a).

_____ [1 mark/markah]

- (c) List 2 prohibited matters while in the Science room.
Senaraikan 2 perkara yang di larang semasa berada di bilik sains.

(i) _____

(ii) _____

[2 marks/markah]

- (d) State one Science room rules that should be obeyed while conducting an experiment.
Nyatakan satu peraturan bilik Sains yang perlu dipatuhi semasa melakukan ujikaji.

_____ [1 mark/markah]

[...../5 marks]

2. Named the apparatus below.
Namakan peralatan berikut.

Conical flasks <i>Kelalang kon</i>	Beaker <i>Bikar</i>	Measuring cylinder <i>Silinder penyukat</i>
Thermometer <i>Termometer</i>	Test tube <i>Tabung uji</i>	



(a)

Name/
Nama: _____



(b)

Name/
Nama: _____



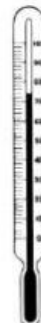
(c)

Name/
Nama: _____



(d)

Name/
Nama: _____



(e)

Name/
Nama: _____

[...../5 marks]

3. Diagram 3.1 below shows the human excretory organ.
Rajah 3.1 di bawah menunjukkan organ perkumuhan manusia.

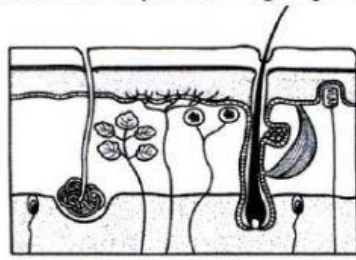


Diagram 3.1

- (a) (i) State the meaning of excretion.
Nyatakan maksud perkumuhan.

_____ [1 mark/markah]

- (ii) State the excretory product that released by this organ.
Nyatakan produk perkumuhan yang disingkirkan daripada organ itu.

_____ [1 mark/markah]

- (b) State one good habit to ensure the excretory organs always in healthy condition.
Nyatakan satu amalan yang baik untuk memastikan organ perkumuhan sentiasa dalam keadaan sihat.

_____ [1 mark/markah]

- (c) Diagram 3.2 below shows a boy experienced the stomach ache.
Rajah 3.2 di bawah menunjukkan seorang budak lelaki yang mengalami sakit perut.



What is the process shows here?
Apakah proses yang ditunjukkan itu?
 State the importance of this process to human.
Nyatakan kepentingan proses itu kepada manusia.

Process/proses: _____

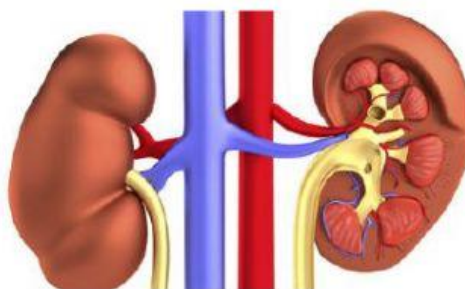
The importance/: _____

Kepentingan _____

[2 marks/markah]

[...../ 5 marks]

4. Diagram 4.1 below shows an excretory organ.
Rajah 4.1 di bawah menunjukkan satu organ perkumuhan.



- (a) Named this excretory organ.
Namakan organ perkumuhan ini.

[1 mark/markah]

- (b) Diagram 4.2 below shows the excretory products.
Rajah 4.2 di bawah menunjukkan produk perkumuhan.

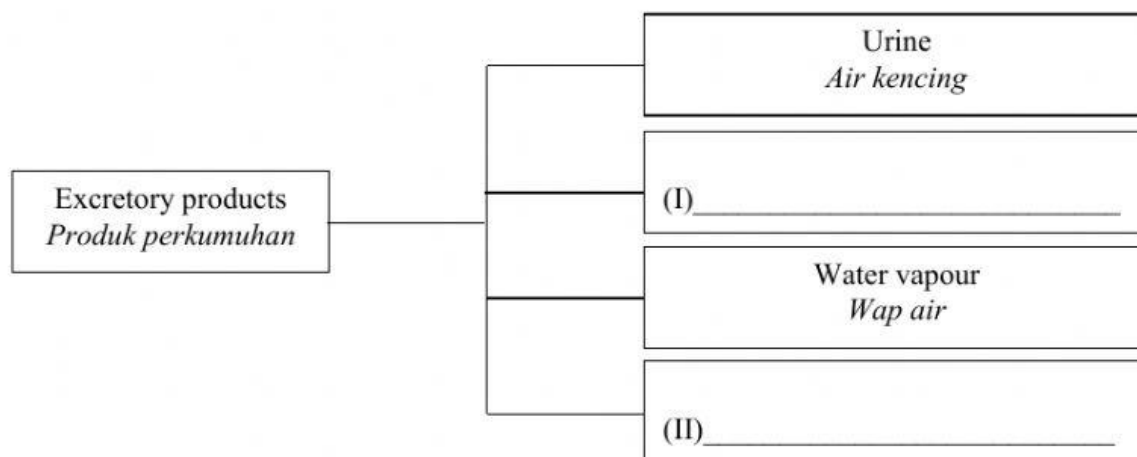


Diagram 4.2

- (i) Fill Diagram 4.2 with the excretory product.
Isi Rajah 4.2 dengan produk perkumuhan.
- (ii) Named the excretory organ that released water vapour as its excretory product.
Namakan organ perkumuhan yang membebaskan wap air sebagai produk perkumuhannya.

[2 marks/markah]

[1 mark/markah]

- (c) Why did human need to undergo the excretion process?
Mengapa manusia perlu menjalankan proses perkumuhan?

[1 mark/markah]

[...../ 5 marks]

5. Diagram 5.1 shows the part of body that involved during Farhan's breathing.
Rajah 5.1 menunjukkan bahagian badan yang terlibat semasa Farhan bernafas.

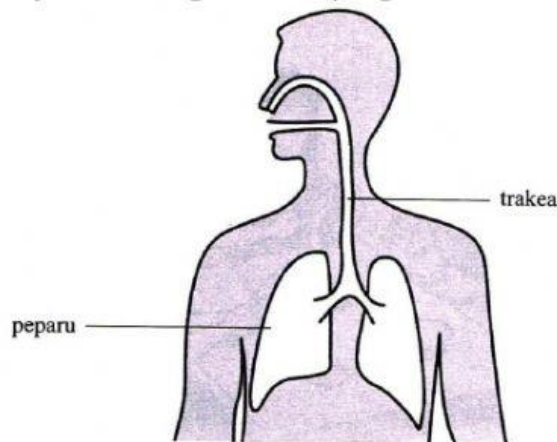


Diagram 5.1 /Rajah 5.1

- (a) (i) Draw arrows (→) to show the passage of air during inhalation at Diagram 5.1.
Lukis anak panah (→) untuk menunjukkan laluan udara semasa menarik nafas pada Rajah 5.1.

[1 mark/ markah]

- (iii) During inhalation, what happens to Farhan's chest?
 Tick (✓) to the correct answer.
*Semasa menarik nafas, apakah yang berlaku kepada dada Farhan?
 Tandakan (✓) pada jawapan yang betul.*

Chest move up and expands
Dada naik dan mengembang

Chest move down and contracts
Dada turun dan mengempis

[1 mark/ markah]

- (b) Table 5.2 shows the results of an investigation that conducted on three pupils.
Jadual 5.2 menunjukkan keputusan penyiasatan yang dilakukan ke atas tiga orang murid.

Name Nama	Rate of breathing Kadar pernafasan	
	Rest Keadaan rehat	After vigorous activity (Jumping) Selepas aktiviti lasak (Melompat)
Ramli	18	22
Farhan	21	26
Zamri	20	24

Table 5.2 / Jadual 5.2

- (i) State why is the rate of breathing after vigorous activity is higher than the rate of breathing during rest condition.
Nyatakan mengapa kadar pernafasan selepas melakukan aktiviti lasak adalah lebih tinggi daripada kadar pernafasan semasa keadaan rehat.

[1 mark/ markah]

- (ii) Based on Table 5.2, draw a bar chart to shows the rate of breathing of each pupils.
Berdasarkan Jadual 5.2, lukis satu carta palang untuk menunjukkan kadar pernafasan setiap murid itu.

[2 marks/markah]

[...../5 marks]

6. Diagram 6.1 shows an investigation. Two similar candles are put into two different size of jar.
Rajah 6.1 menunjukkan satu penyisaatan. Dua batang lilin yang serupa dimasukkan ke dalam dua buah balang yang berlainan saiz.

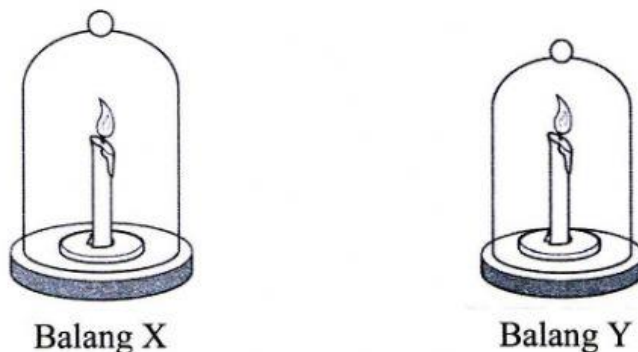


Diagram 6.1 / Rajah 6.1

- (a) What can be observed onto the flame of candles in both jar after 3 minutes?
Apakah yang dapat diperhatikan ke atas nyalaan lilin dalam kedua-dua balang selepas 3 minit?

_____ [1 mark/ markah]

- (b) State one inference for the answer at 6 (a).
Nyatakan satu inferens bagi jawapan di 6(a).

_____ [1 mark/ markah]

- (c) State the variables involved in this investigation.
Nyatakan pemboleh ubah yang terlibat dalam penyiasatan ini.

(i) Manipulated variable
Pemboleh ubah dimanipulasi:

(ii) Responding variable
Pemboleh ubah bergerakbalas:

(iii) Constant variable
Pemboleh ubah dimalarkan:

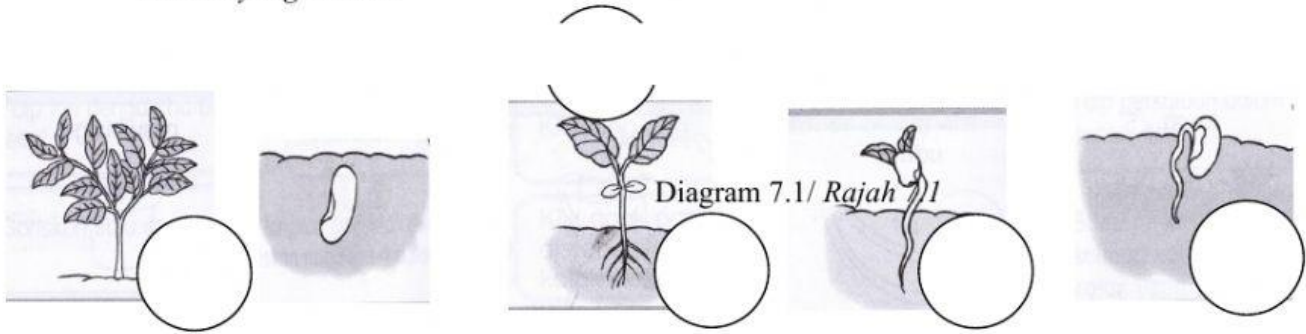
_____ [3 marks/ markah]

_____ [...../ 5 marks]

7. Diagram 7.1 shows the germination of green bean young plant that carried out by a group of pupils. The observation is done within 4 weeks and found that the young plant grow well.
Rajah 7.1 menunjukkan percambahan anak pokok kacang hijau yang telah dijalankan oleh sekumpulan murid. Pemerhatian telah dibuat selama 4 minggu dan di dapati bahawa anak pokok tumbuh dengan subur.

(a) Arrange the sequence of growth of the young plant by writing number 1 until 5 in the correct circles.

Susun urutan tumbesaran anak pokok tersebut dengan menulis nombor 1 hingga 5 dalam bulatan yang sesuai.



[1 mark/ markah]

(b) State one observation that can be make based on the diagram above.

Nyatakan satu pemerhatian yang dapat kamu dapat buat berdasarkan rajah di atas?

[1 mark/ markah]

(c) After five weeks, found that the plant is died. Give one inferens (reason) why the plant died.

Selepas lima minggu, didapati pokok telah mati. Berikan satu inferens (alasan) mengapa pokok tersebut mati.

[1 mark/ markah]

(d). Based on the above investigation, state;
 Berdasarkan penyiasatan di atas, nyatakan:

(i) Manipulated variable
Pemboleh ubah dimanipulasi:

(ii) Responding variable
Pemboleh ubah bergerakbalas:

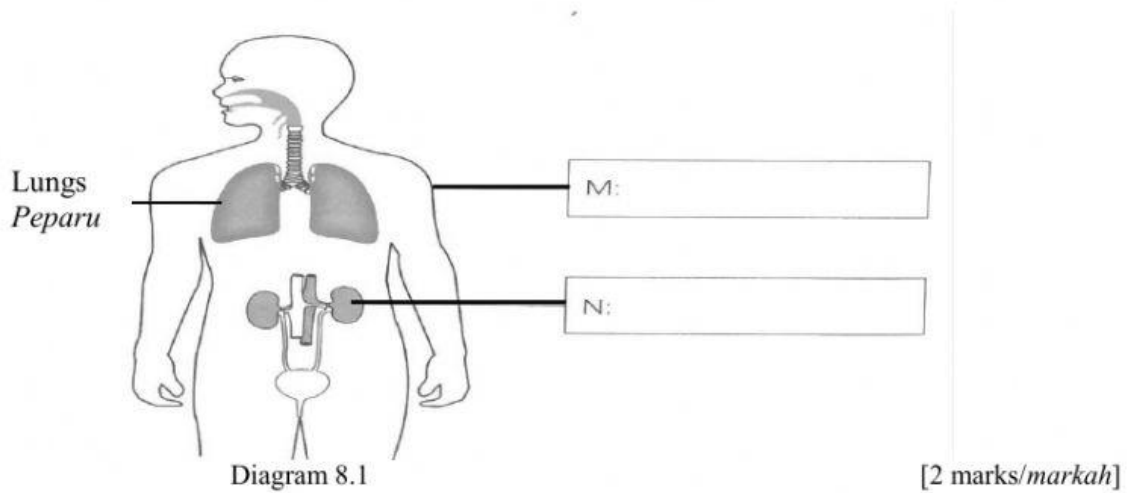
[2 marks/ markah]

[...../ 5 marks]

8. Diagram 8.1 below shows the human excretory organ.

Rajah 8.1 di bawah menunjukkan sistem perkumuhan manusia.

- (a) Labelled the two excretory organ in the diagram.
Labelkan dua organ perkumuhan dalam rajah tersebut.



- (b) State the excretory product produced by organ M
Nyatakan bahan kumuh yang dihasilkan oleh organ M.

[1 mark/markah]

- (c) State the passage of air during exhalation process
Nyatakan laluan udara semasa manusia menghembus nafas.



- (d) Encik Malik was suffering from kidney stone diseases. The doctor advice him to drinks more boiled water. Amongst the excretory organs in Diagram 8.1 above, which organ is having problem?
Encik Malik menghidap penyakit batu karang, doktor menasihatkan beliau supaya minum banyak air masak. Antara organ di atas organ manakah yang mungkin mengalami masalah?

[1 mark/markah]

[...../ 5 marks]