

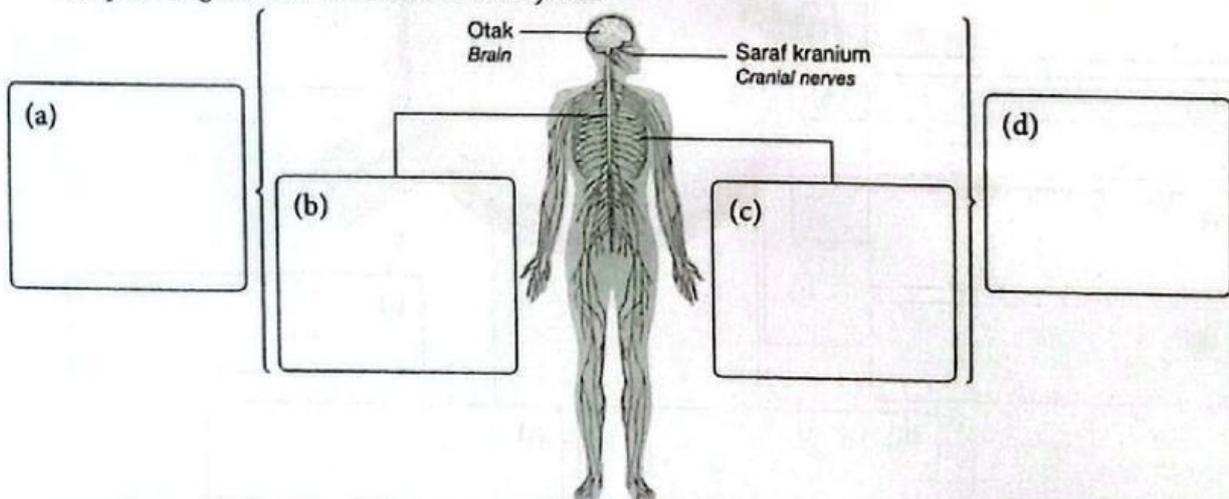
1. Tuliskan BENAR atau PALSU bagi pernyataan yang berikut. (11/2)

Write TRUE or FALSE for the following statements.

Pernyataan Statement	BENAR / PALSU TRUE / FALSE
(a) Maklumat yang dihantar oleh sistem saraf ke bahagian lain badan dipanggil sebagai impuls. <i>The information sent by the nervous system to the other parts of the body is called impulses.</i>	
(b) Otak mengawal semua aktiviti badan seperti mendengar, berlari dan membaca. <i>The brain controls all the body activities such as listening, running and reading.</i>	
(c) Saraf tunjang mengawal tindakan refleks seperti ketawa dan menjerit. <i>The spinal cord controls the reflex actions such as laughing and screaming.</i>	
(d) Berpeluh dan menggigil ialah contoh tindakan luar kawal. <i>Sweating and shaking are the examples of involuntary actions.</i>	
(e) Sistem saraf periferi menghubungkan sistem saraf pusat kepada reseptor dan efektor. <i>The peripheral nervous system connects the central nervous system to the receptors and effectors.</i>	
(f) Tindakan luar kawal melibatkan medula oblongata dan saraf tunjang. <i>The involuntary actions involves medulla oblongata and the spinal cord.</i>	
(g) Tindakan terkawal seperti peristalsis boleh berlaku tanpa kita sedari. <i>Voluntary actions such as peristalsis can happen without us realising it.</i>	

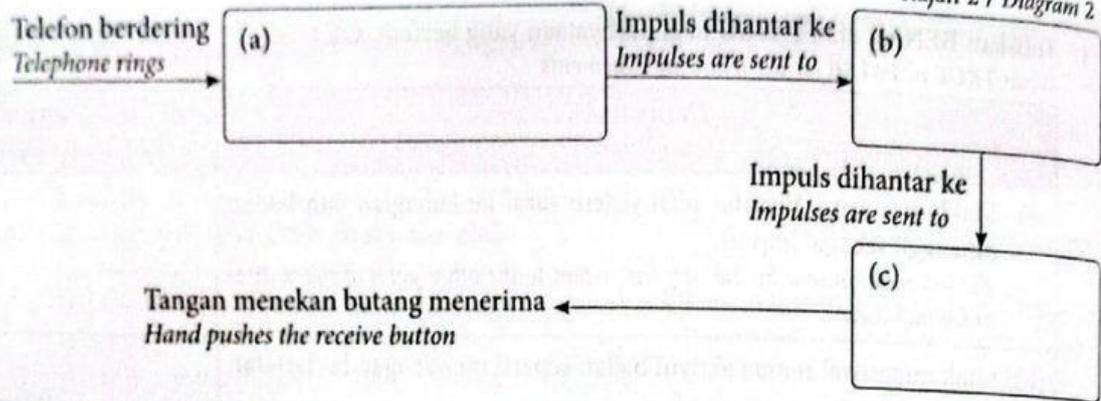
2. Lengkapkan Rajah 1 mengenai sistem saraf manusia. (11/2)

Complete Diagram 1 on the human nervous system.



Rajah 1 / Diagram 1

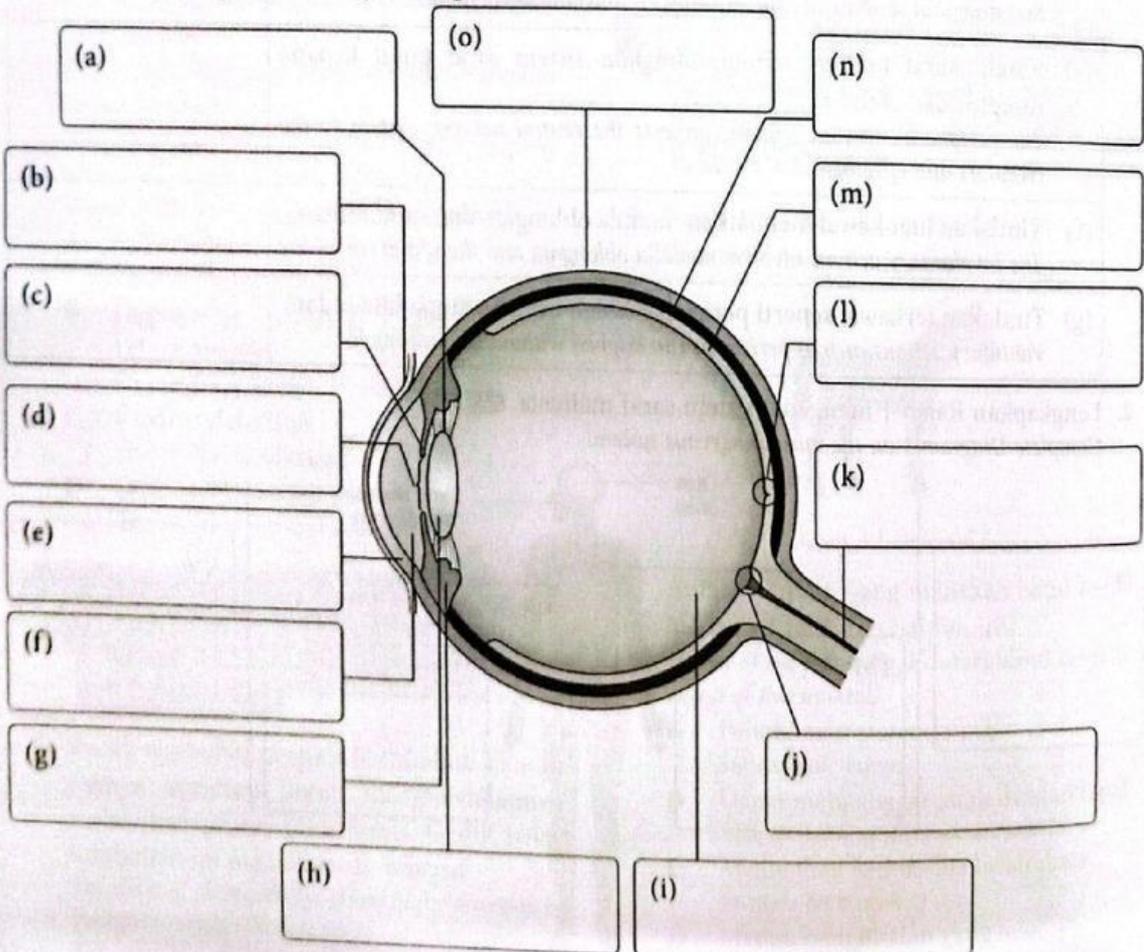
3. Rajah 2 menunjukkan telefon Ali yang tiba-tiba berdering. Isi tempat kosong untuk menunjukkan proses tindakan terkawal yang berlaku dalam situasi ini.  
 Diagram 2 shows Ali's phone that is suddenly ringing. Fill in the blanks to show the process of voluntary actions that takes place in this situation.



**1.2** Rangsangan dan Gerak Balas dalam Manusia  
 Stimuli and Responses in Humans

Buku Teks: m.s. 11 - 29

1. Namakan bahagian-bahagian mata manusia dalam Rajah 1. **TP 1**  
 Name the parts of the human eye in Diagram 1.



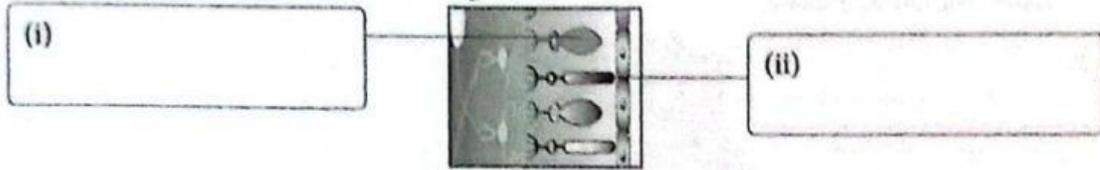
Rajah 1 / Diagram 1

2. Retina mempunyai dua jenis fotoreseptor, iaitu sel rod dan sel kon.

*Retina has two types of photoreceptors, rod cells and cone cells.*

(a) Namakan bahagian-bahagian yang dilabelkan dalam Rajah 2. **111** ①

*Name the parts that are labelled in Diagram 2.*



Rajah 2 / Diagram 2

(b) Isi tempat kosong dengan jawapan yang betul. **111** ②

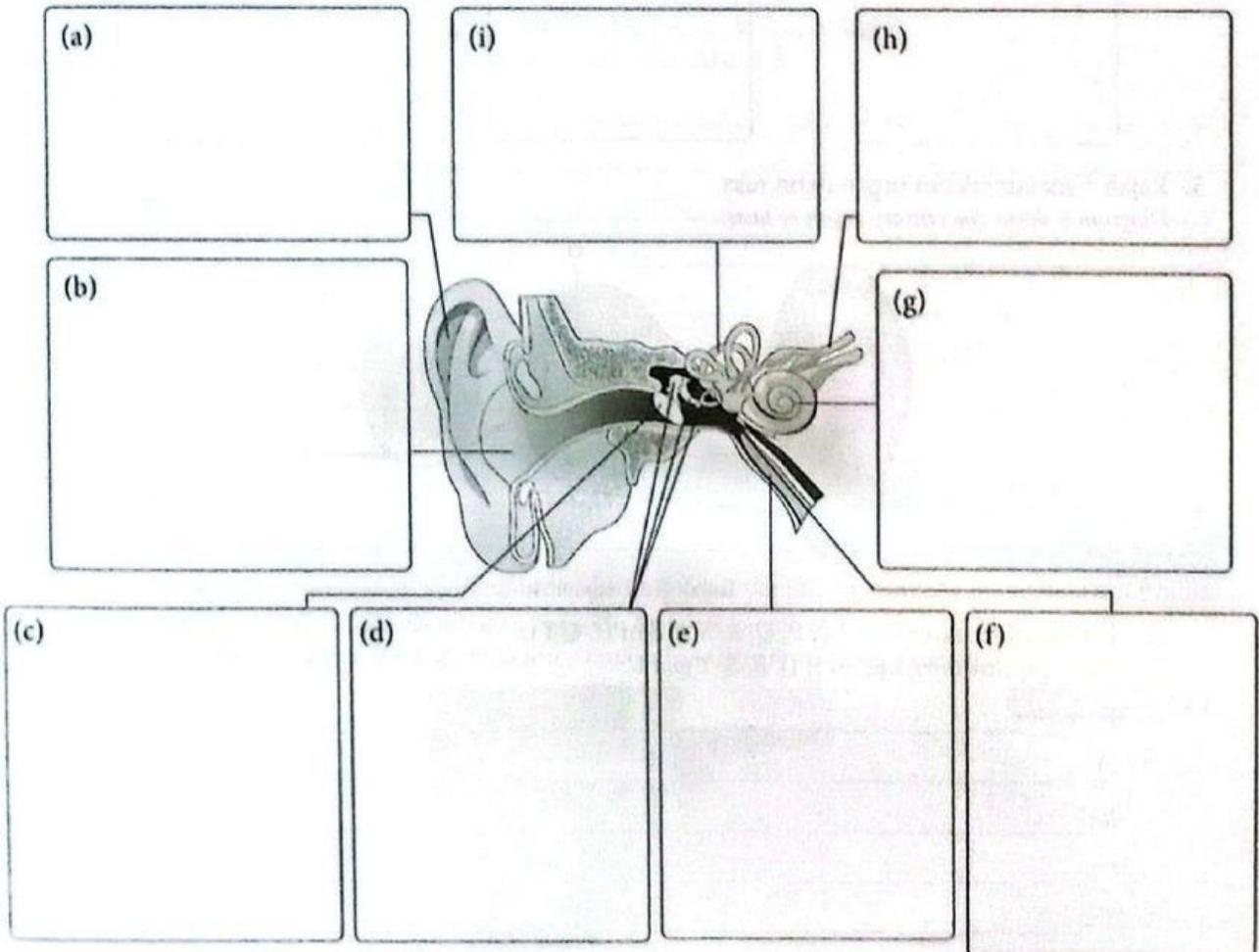
*Fill in the blanks with the correct answers.*

\_\_\_\_\_ peka kepada cahaya yang samar tetapi tidak peka kepada warna cahaya manakala \_\_\_\_\_ pula peka kepada warna cahaya dalam keadaan yang terang dan boleh membezakan warna-warna cahaya.

\_\_\_\_\_ are sensitive to dim lights but not sensitive to the colours of light while \_\_\_\_\_ are sensitive to the colour of lights under bright conditions and can differentiate the colours of light.

3. Nyatakan nama dan fungsi bagi bahagian-bahagian telinga manusia dalam Rajah 3. **111** ②

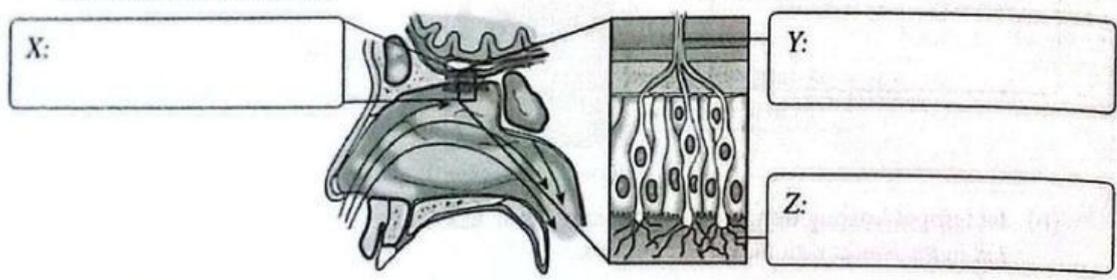
*State the names and functions of the parts of the human ear in Diagram 3.*



Rajah 3 / Diagram 3

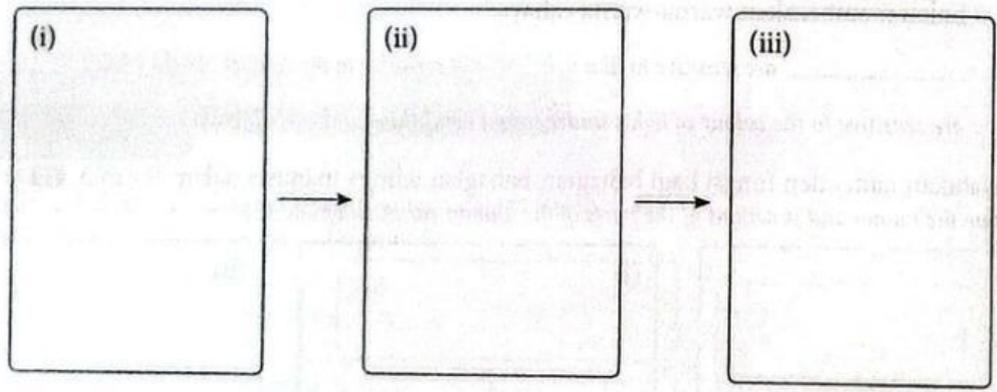
4. Rajah 4 menunjukkan organ deria bau.  
Diagram 4 shows the sensory organ of smell.

(a) Namakan struktur X, Y dan Z. **TP1**  
Name structure X, Y and Z.

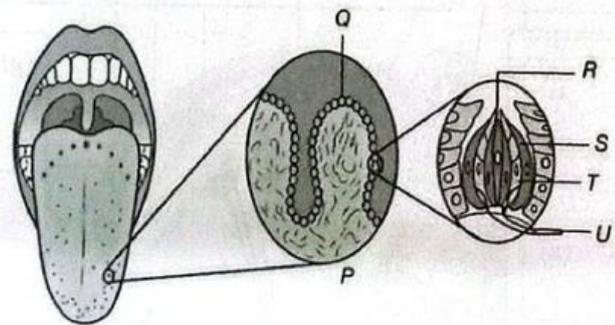


Rajah 4 / Diagram 4

(b) Lengkapkan urutan bagi proses yang berlaku di struktur X apabila kita menghidu sesuatu bau.  
Complete the order of process that takes place at structure X when we smell something. **TP2**



5. Rajah 5 menunjukkan organ deria rasa.  
Diagram 5 shows the sensory organ of taste.



Rajah 5 / Diagram 5

(a) Namakan struktur berlabel P, Q, R, S, T dan U. **TP1**  
Name the structures labelled P, Q, R, S, T and U.

- P: \_\_\_\_\_
- Q: \_\_\_\_\_
- R: \_\_\_\_\_
- S: \_\_\_\_\_
- T: \_\_\_\_\_
- U: \_\_\_\_\_

- (b) Apakah yang berlaku di struktur R, T dan U ketika kita sedang mengunyah makanan?  
*What happens at structure R, T and U when we are chewing food?*

KBAT Mengaplikasi

impulses

saliva

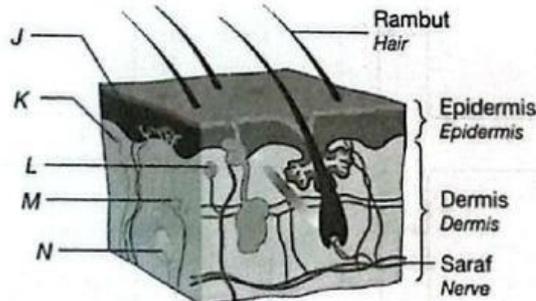
brain

buds

The chemicals in the food that we chew will dissolve in \_\_\_\_\_ and enter the taste \_\_\_\_\_ through R. then, R stimulate T to produce nerve \_\_\_\_\_ which are then sent to the \_\_\_\_\_ through U to be interpreted.

Bab 1

6. Rajah 6.1 menunjukkan organ deria sentuhan.  
*Diagram 6.1 shows the sensory organ of touch.*



Rajah 6.1 / Diagram 6.1

- (a) Namakan struktur dan nyatakan fungsi bagi J, K, L, M dan N. **UL 1**  
*Name the structures and state the functions of J, K, L, M and N.*

J: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

K: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

L: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

M: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

N: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

- (b) Rajah 6.2 menunjukkan seorang individu yang cacat penglihatan sedang menggunakan Braille. Bagaimanakah Braille membantu individu tersebut membaca?  
*Diagram 6.2 shows a blind person is using Braille. How does Braille help the blind person to read?*

brain

impulses



nerves

receptors

KBAT Mengaplikasi

Braille consists of raised dots that represent letters. When these dots are touched with fingertips, the touch \_\_\_\_\_ in the skin become activated and produce \_\_\_\_\_. These impulses are then sent from the \_\_\_\_\_ in the fingertips to the \_\_\_\_\_ to be interpreted.