

Bahagian A

1. Maklumat berikut menunjukkan komponen yang terdapat dalam sistem saraf manusia.
The following information shows the components found in the human nervous system.

K – Saraf spina / Spinal nerves
L – Saraf tunjang / Spinal cord
M – Saraf kranium / Cranial nerves
N – Otak / Brain

Antara berikut, yang manakah merupakan sistem saraf pusat? **TP 1 Rendah**
Which of the following are the central nervous system?

- A K dan L / K and L
B L dan N / L and N
C N dan M / N and M
D M dan K / M and K

2. Antara berikut, yang manakah merupakan contoh tindakan terkawal dan tindakan luar kawal yang betul? **TP 1 Rendah**
Which of the following is the correct example of a voluntary action and an involuntary action?

	Tindakan terkawal Voluntary action	Tindakan luar kawal Involuntary action
A	Rembesan air liur Secretion of saliva	Berenang Swimming
B	Peristalsis Peristalsis	Denyutan jantung Heartbeat
C	Denyutan jantung Heartbeat	Pernafasan Breathing
D	Berenang Swimming	Peristalsis Peristalsis

3. Apakah bahagian pada mata yang mengawal kuantiti cahaya yang masuk ke dalam mata?
What is the part of the eye that controls the amount of light entering the eye? **TP 2 Sederhana**
- A Kanta mata / Eye lens
B Kornea / Cornea
C Pupil / Pupil
D Iris / Iris

4. Maklumat berikut menunjukkan fungsi bahagian telinga.
The following information shows the function of the ear:

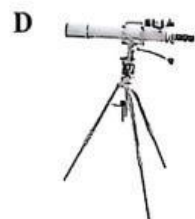
P : Menguatkan getaran bunyi lalu memindahkannya ke jendela bujur
Amplify the sound vibrations and transfer them to the oval window

Q : Menghantar impuls saraf dari koklea ke otak untuk ditafsirkan
Send nerve impulses from the cochlea to the brain for interpretation

Apakah P dan Q? **TP 2 Sederhana**
What are P and Q?

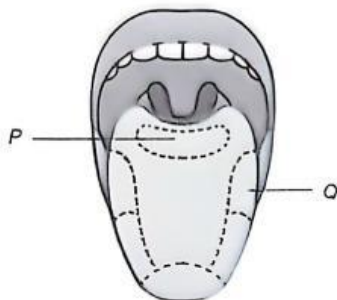
	P	Q
A	Jendela bujur Oval window	Salur telinga Ear canal
B	Tiub Eustachio Eustachian tube	Salur separuh bulat Semicircular canals
C	Osikel Ossicles	Saraf auditori Auditory nerve
D	Cuping telinga Earlobe	Koklea Cochlea

5. Antara berikut, yang manakah digunakan untuk mengatasi had pendengaran? **TP 2 Sederhana**
Which of the following is used to overcome hearing limitations?



6. Rajah di bawah menunjukkan struktur lidah manusia.

The diagram below shows the structure of the human tongue.



Encik Ahmad dan isterinya sedang menonton televisyen. Encik Ahmad makan ubat, manakala isterinya sedang makan buah mangga.

Apakah makanan yang akan dirangsang oleh lidah di bahagian P dan Q?

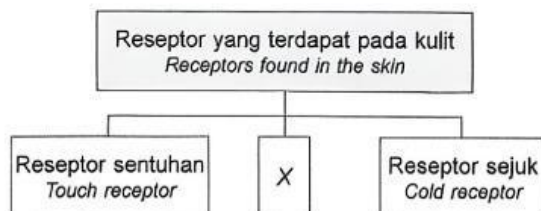
Mr. Ahmad and his wife are watching television. Mr. Ahmad is taking medicine while his wife is eating a mango.

What are the foods that will be stimulated by the tongue in parts P and Q?

	Bahagian P Part P	Bahagian Q Part Q
A	Ubat Medicine	Ubat Medicine
B	Ubat Medicine	Buah mangga Mango fruit
C	Buah mangga Mango fruit	Buah mangga Mango fruit
D	Buah mangga Mango fruit	Ubat Medicine

7. Rajah di bawah menunjukkan jenis reseptor yang terdapat pada kulit.

The diagram below shows the types of receptors found in the skin.



Apakah X?

What is X?

- A Reseptor tekanan / Pressure receptor
B Reseptor refleks / Reflex receptor
C Reseptor cahaya / Light receptor
D Reseptor bau / Odour receptor

8. Pucuk tumbuhan menunjukkan fototropisme positif. Antara berikut, yang manakah merupakan kepentingan gerak balas tersebut terhadap tumbuhan?

Plant shoots show positive phototropism. Which of the following is the importance of the response to plants?

- A Membolehkan tumbuhan tumbuh jauh ke dalam tanah
Allows plants to grow deep into the soil
B Membolehkan tumbuhan memperoleh cahaya matahari
Allows plants to acquire sunlight
C Membolehkan tumbuhan mencengkam objek untuk memperoleh sokongan
Allows plants to grip the object to gain support
D Membolehkan tumbuhan mendapatkan air dan garam mineral untuk menjalankan fotosintesis
Allows plants to get water and mineral salts to carry out photosynthesis

9. Antara berikut, pasangan gerak balas dengan rangsangannya yang manakah betul?

Which of the following is the correct pair of response and its stimulus?

	Gerak balas Response	Rangsangan Stimulus
A	Tigmotropisme Thigmotropism	Pucuk tumbuh ke arah cahaya Shoots grow towards the light
B	Fototropisme Phototropism	Akar tumbuh ke arah sumber air Roots grow towards the source of water
C	Hidrotropisme Hydrotropism	Tumbuhan mencengkam objek atau tumbuhan lain Plants cling to other objects or plants
D	Geotropisme Geotropism	Akar tumbuh ke bawah mengikut arah graviti Roots grow downwards in the direction of gravity