

Bahagian A

Jawab semua soalan.

- 1 Pilih pernyataan yang benar mengenai homeostasis.

Choose the correct statement about homeostasis.

- A Hanya akan berlaku apabila persekitaran luar tidak stabil.

Only occurs when the external environment is unstable.

- B Merupakan penyelarasan fungsi dalam badan.

Are functional adjustments in the body.

- C Ginjal penting dalam kawal atur suhu badan.

The kidneys are important in the regulation of body temperature.

- D Berlaku sepanjang hari.

Occurs throughout the day.

- 2 Homeostasis melibatkan

Homeostasis involves the

- I kawal atur tekanan udara
regulation of air pressure
- II kawal atur suhu badan
regulation of body temperature
- III kawal atur kandungan air
regulation of water content
- IV kawal atur pergerakan badan
regulation of body movement

- A I dan and II

- C I dan and III

- B II dan and III

- D II dan and IV

- 3 Apakah organ yang terlibat dalam kawal atur kandungan air dalam badan?

Which organ is involved in regulating the water content in the body?

- A Jantung
Heart

- C Usus
Intestine

- B Ginjal
Kidneys

- D Peparu
Lungs

- 4 Maklumat berikut menerangkan mengenai mekanisme pembetulan yang berlaku dalam badan manusia apabila berlaku perubahan.

The following information describes the correction mechanisms that occur in the human body when changes occur.

- Air kencing dihasilkan dalam kuantiti yang sedikit
Little urine is produced
- Berpeluh
Sweating
- Aktiviti otot rangka kurang
Reduced skeletal muscle activities

Apakah perubahan yang telah berlaku?
What is the change that has occurred?

- A Kekurangan air dalam badan
Lack of water in the body
- B Air berlebihan dalam badan
Excess water in the body
- C Suhu badan meningkat
Body temperature increases
- D Suhu badan menurun
Body temperature drops

- 5 Jadual berikut menunjukkan beberapa jenis haiwan dan cara mengekalkan homeostasis terhadap perubahan suhu persekitaran. Padanan yang manakah betul?

The table shows some animals and the ways they maintain homeostasis against changes in their surrounding temperature. Which pair is correct?

	Haiwan Animal	Cara mengekalkan homeostasis Way of maintaining homeostasis
A	Anjing Dog	Menjilat bulu Licks its fur
B	Cicak Lizard	Menutup spirakel Closes its spiracles
C	Kucing Cat	Menjelirkan lidah Hangs out its tongue
D	Siput babi Snail	Menghasilkan bendalir Produces fluid

- 6 Rajah berikut menunjukkan satu haiwan.
The diagram shows an animal.



Antara berikut, yang manakah gerak balas homeostasis bagi haiwan tersebut?

Which of the following is the homeostasis response of the animal?

- A Menghasilkan mukus untuk mengurangkan kehilangan air
Produces mucus to reduce water loss
- B Jantung berdegup dengan perlahan
Its heart beats slowly
- C Bergerak lebih pantas untuk meningkatkan metabolisme
Moves faster to increase its metabolism
- D Menjelirkan lidah
Hangs its tongue out

- 7 Mengapakah stoma pada daun tumbuhan tertutup pada keadaan yang tertentu?
Why do the stomata on plant leaves close in certain situations?

- A Untuk mengurangkan kehilangan air
To reduce water loss
- B Untuk mengurangkan kadar proses fotosintesis
To reduce the rate of photosynthesis
- C Untuk mengurangkan kadar respirasi
To reduce the rate of respiration
- D Untuk mengurangkan pembebasan karbon dioksida
To reduce the release of carbon dioxide

- 8 Antara pasangan faktor berikut, yang manakah menyebabkan kadar transpirasi dalam tumbuhan meningkat?

Which of the following pairs of factors causes the transpiration rate in plants to increase?

	Suhu persekitaran Surrounding temperature	Kelembapan Humidity
A	Sejuk Cold	Rendah Low
B	Sejuk Cold	Tinggi High
C	Panas Hot	Rendah Low
D	Panas Hot	Tinggi High