

19. Which group of organisms undergoes the process of exchange of respiratory gases through the skin?

Kumpulan organisma manakah menjalani proses pertukaran gas melalui kulit?

- |                                    |                                       |
|------------------------------------|---------------------------------------|
| <b>A</b> <i>Fish</i><br>Ikan       | <b>B</b> <i>Reptiles</i><br>Reptilia  |
| <b>C</b> <i>Mammals</i><br>Mamalia | <b>D</b> <i>Amphibians</i><br>Amfibia |

20. Diagram 10 below shows a cross section through a part of a lung.  
Rajah 10 di bawah menunjukkan keratan rentas melalui sebahagian daripada paru.



Diagram 10  
Rajah 10

What are the adaptations of alveolus which increase the rate of gaseous exchange?  
Apakah adaptasi pada alveolus yang dapat menambahkan kadar pertukaran gas?

- I *Able to expand and contract*  
Boleh mengembang dan menguncup
- II *Small surface area*  
Luas permukaan yang kecil
- III *Located close to blood capillaries*  
Terletak berdekatan dengan kapilari darah
- IV *Covered by a thin film of moisture*  
Diliputi oleh satu lapisan nipis kelembapan

- |                                          |                                          |
|------------------------------------------|------------------------------------------|
| <b>A</b> I dan II<br><i>I and II</i>     | <b>B</b> I dan IV<br><i>I and IV</i>     |
| <b>C</b> II dan III<br><i>II and III</i> | <b>D</b> III dan IV<br><i>III and IV</i> |

25. Diagram 13 shows the condition that occur in a person when the interstitial fluid cannot reabsorbed back to the circulatory system.

*Rajah 13 menunjukkan keadaan yang berlaku pada seseorang apabila bendalir interstis tidak dapat diserap kembali ke sistem peredaran darah.*



Diagram 13  
*Rajah 13*

What is the condition experienced by the person ?  
*Apakah keadaan yang dialami oleh individu ini?*

- |                                   |                                |
|-----------------------------------|--------------------------------|
| A. Thrombosis<br><i>Trombosis</i> | B. Marasmus<br><i>Marasmus</i> |
| C. Oedema<br><i>Oedema</i>        | D. Riket<br><i>Riket</i>       |
26. Which of the following is the valve that prevents the back flow of blood from the right ventricle into the right atrium in human heart?  
*Antara berikut, manakah injap yang menghalang pengaliran balik darah dari ventrikel kanan ke atrium kanan dalam jantung manusia?*
- |                                             |                                         |
|---------------------------------------------|-----------------------------------------|
| A Bicuspid valve<br><i>Injap bikuspid</i>   | B Semilunar valve<br><i>Injap sabit</i> |
| C Tricuspid valve<br><i>Injap trikuspid</i> | D Pocket valve<br><i>Injap poket</i>    |

The diagram 15 shows a mechanism of antibody destroying an antigen.

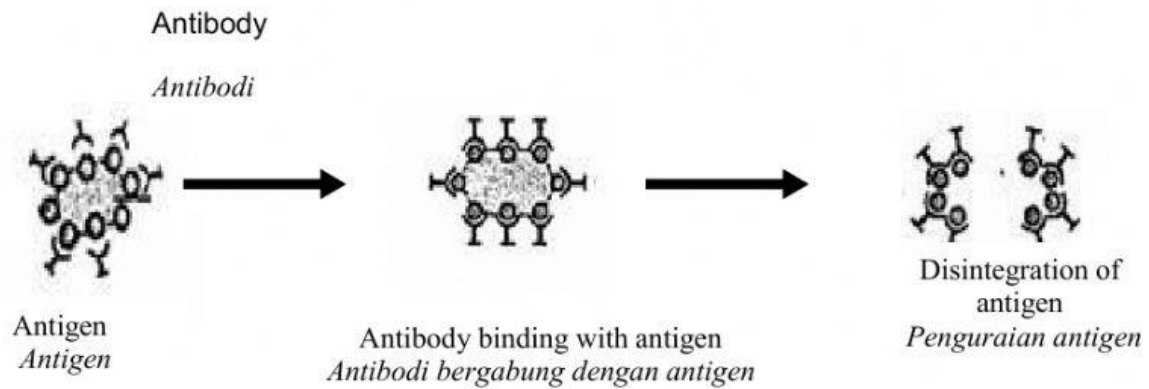


Diagram  
15  
Rajah 15

Which of the following is the mechanism?  
*Antara berikut, yang manakah mekanisme itu?*

**A** Lysis Lisis

**B** Neutralisation  
*Peneutralan*

**C** Precipitation  
*Pemendakan*

**D** Agglutination  
*Penggumpalan*

29. The diagram 16 shows a type of vertebrae.

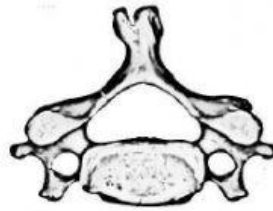


Diagram 16  
Rajah 16

Which of the following is the vertebrae?  
*Antara berikut, yang manakah vertebra itu?*

- |                                                        |                                                       |
|--------------------------------------------------------|-------------------------------------------------------|
| <b>A</b> Cervical vertebrae<br><i>Vertebra serviks</i> | <b>B</b> Thoracic vertebrae<br><i>Vertebra toraks</i> |
| <b>C</b> Atlas vertebrae<br><i>Vertebra atlas</i>      | <b>D</b> Lumbar vertebrae<br><i>Vertebra lumbar</i>   |

30. The diagram 17 shows a pelvic girdle of human.

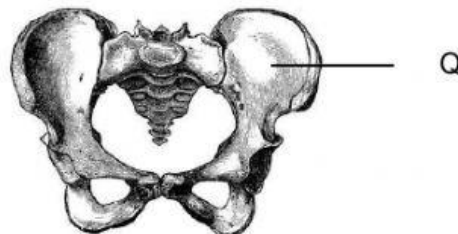


Diagram 17  
Rajah 17

What is part Q ?  
*Apakah bahagian Q ?*

- |                                  |                                   |
|----------------------------------|-----------------------------------|
| <b>A</b> Coccyx<br><i>Koksik</i> | <b>B</b> Ischium<br><i>Iskium</i> |
| <b>C</b> Pubis<br><i>Pubis</i>   | <b>D</b> Ilium<br><i>Ilium</i>    |

31. The diagram 18 shows a student standing in front of a flag.

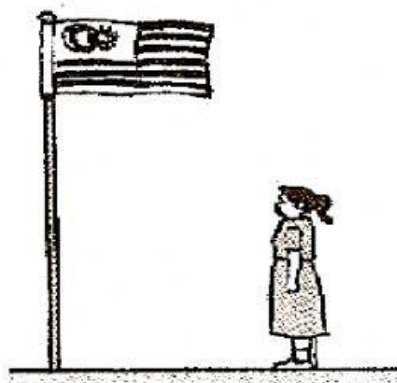


Diagram 18  
Rajah 18

Which of the following is true about the muscles in her arm in this posture?  
*Antara berikut, yang manakah benar tentang otot-otot pada lengan pelajar dalam postur ini?*

|   | Biceps muscle<br><i>Otot biceps</i> | Triceps muscle<br><i>Otot triceps</i> |
|---|-------------------------------------|---------------------------------------|
| A | Relaxes<br><i>Mengendur</i>         | Contracts<br><i>Mengecut</i>          |
| B | Contracts<br><i>Mengecut</i>        | Contracts<br><i>Mengecut</i>          |
| C | Contracts<br><i>Mengecut</i>        | Relaxes<br><i>Mengendur</i>           |
| D | Relaxes<br><i>Mengendur</i>         | Relaxes<br><i>Mengendur</i>           |

Diagram 22 shows the structure of nephron  
Rajah 22 menunjukkan struktur satu nefron

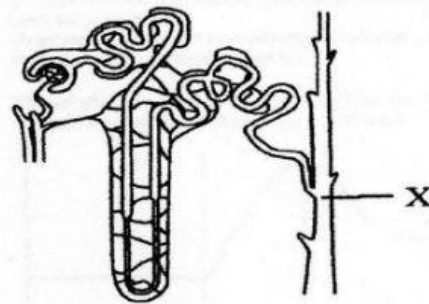


Diagram 22  
Rajah 22

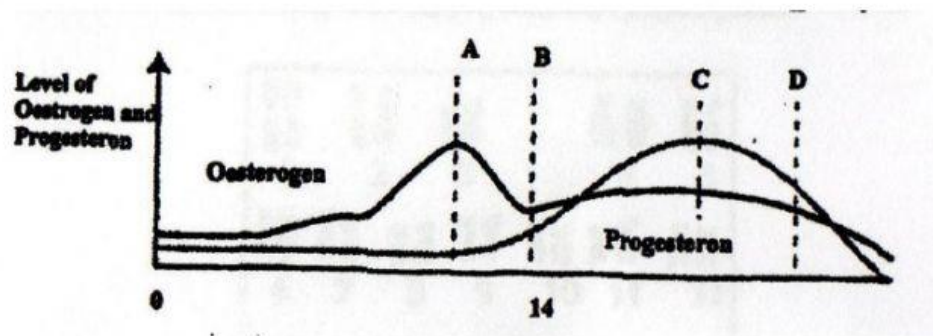
Which of the following activities cause X to be more permeable to water?  
Antara aktiviti berikut, yang manakah akan menyebabkan X lebih telap kepada air ?

- P – Eat salty foods  
*Makan makanan yang masin*
- Q – Drinking a lot of carbonated drinks  
*Banyak minum air berkarbonat*
- R – Exercise a lot  
*Banyak bersenam*
- S – Drinking a lot of water  
*Banyak minum air*

- |          |                           |          |                                   |
|----------|---------------------------|----------|-----------------------------------|
| <b>A</b> | P and Q<br><i>P dan Q</i> | <b>B</b> | P , Q and R<br><i>P , Q dan R</i> |
| <b>C</b> | P and R<br><i>P dan R</i> | <b>D</b> | P , R and S<br><i>P, R dan S</i>  |

42 Diagram 27 shows the level of oestrogen and progesterone in the blood of a female.

*Rajah 27 menunjukkan aras estrogen dan progesteron dlm darah seorang perempuan.*



Which of the labeled stage A, B, C or D, ovulation occur ?

*Antara peringkat berlabel A, B, C dan D yang manakah ovulasi berlaku?*