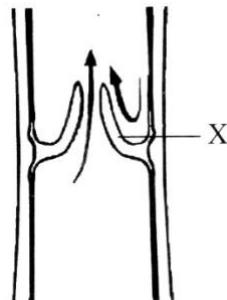


### SOALAN OBJEKTIF

1. Which of the following substance transports oxygen?  
*Antara bahan berikut. yang manakah mengangkut oksigen?*
- P      A Haemolymph  
*Hemolimfa*
- R      B Haemoglobin  
*Hemoglobin*
- F      C Fibrinogen  
*Fibrinogen*
- S      D Plasma  
*Plasma*
2. The diagram shows the longitudinal section of a vein  
*Rajah menunjukkan keratan membujur suatu vena*



What is the role of X?  
*Apakah peranan X?*

- A Decrease the size of the lumen of the vein  
*Mengurangkan saiz lumen pada vena*
- B Prevent the back flow of blood  
*Mengelakkan pengaliran balik darah*
- C Increase the blood pressure in the vein  
*Meningkatkan tekanan darah dalam vena*
- D Speed up the flow of blood in the vein  
*Meningkatkan kelajuan pengaliran darah*

3. Which of the arteries carries blood with the lowest oxygen concentration?  
*Arteri yang manakah mengangkut darah dengan kepekatan oksigen yang paling rendah*

- F
- R     A Renal artery  
*Arteri renal*
- B Hepatic artery  
*Arteri hepatis*
- C Mesenteric artery  
*Arteri Mesenteri*
- D Pulmonary artery  
*Arteri pulmonari*

4. Which of the following description is true about blood cells?  
*Antara keterangan berikut, yang manakah benar tentang sel-sel darah?*

P  
S

	Blood Cell	Description
A	Erythrocyte <i>Eritrosit</i>	Biconcave in shape to enable the exchange of shape while passing the blood capillary <i>Berbentuk dwicekung supaya boleh berubah bentuk semasa melalui kapilari darah</i>
B	Platelet <i>Platlet</i>	Without nucleus and involved in the blood clotting mechanism <i>Tanpa nuklues dan terlibat dalam mekanisme pembekuan darah</i>
C	Monocytes <i>Monosit</i>	Produced in the bone marrow and produce antibodies to destroy pathogens <i>Dihasilkan di sumsum tulang dan menghasilkan antibodi</i>
D	Neutrophil <i>Neutrofil</i>	Without granules and destroy pathogens by phagocytosis <i>Tanpa granul dan memusnahkan patogen secara fagositosis.</i>

5. Which types of leucocytes are capable of carrying out phagocytosis?  
*Antara leukosit berikut, manakah boleh menjalankan proses fagositosis?*

P I Basophils  
*Basofil*

S II Eosinophils  
*Eosinofil*

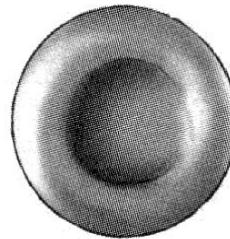
III Neutrophils  
*Neutrofil*

IV Monocytes  
*Monosit*

- A I and II only
- B III and IV only
- C I, II and IV only
- D II, III and IV only

6. The diagram shows a type of human blood cell.  
What is the main function of this cell?

P  
R *Rajah menunjukkan sejenis darah manusia*  
*Apakah fungsi utama sel darah tersebut?*



- A To transport carbon dioxide  
*Mengangkut karbon dioksida*
- B To produce antibodies  
*Menghasilkan antibodi*
- C To transport oxygen  
*Mengangkut oksigen*
- D To produce antitoxins  
*Menghasilkan antitoksin*

7. What is the function of septum in a heart?

*Apakah fungsi septum dalam jantung?*

F

S

- A** To ensure that blood flows smoothly from one chamber of the heart to another  
*Untuk memastikan darah mengalir dengan lancar dari satu ruang jantung ke ruang jantung yang lain*
- B** To separate oxygenated blood from deoxygenated blood  
*Untuk mengasingkan darah beroksigen dan darah terdeoksigen*
- C** To ensure that the heart is divided into two sides  
*Untuk memastikan jantung dibahagikan kepada dua bahagian*
- D** To strengthen the structure of the heart  
*Untuk menguatkan struktur jantung.*

8. The following statement are the characteristics of blood transported by the blood vessel in the human body.

*Pernyataan berikut adalah ciri-ciri darah yang diangkut oleh suatu salur darah dalam badan manusia.*

F

T

- High concentration of oxygen  
*Kepekatan oksigen yang tinggi*
- Low concentration of carbon dioxide  
*Kepekatan karbon dioksida yang rendah*
- High blood pressure  
*Tekanan darah tinggi*

What is the blood vessel?

*Apakah salur darah itu?*

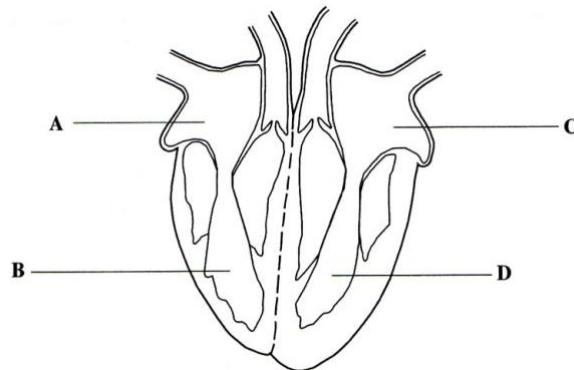
- A** Aorta / Aorta
- B** Vena cava / Vena cava
- C** Pulmonary artery / arteri pulmonari
- D** Pulmonary vein / vena pulmonari

9. The diagram shows a cross-section of the human heart.  
*Rajah menunjukkan satu keratan rentas jantung manusia,*

P  
R

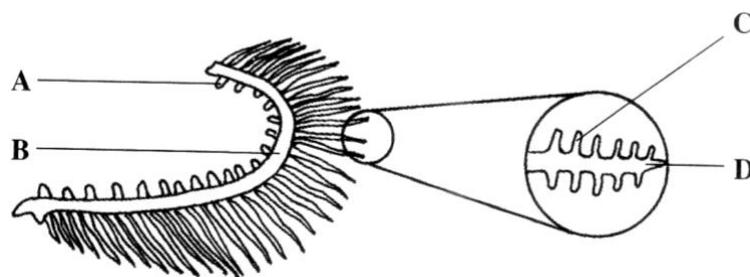
Which part **A**, **B**, **C** or **D** pumps the blood into the pulmonary artery?  
*Antara bahagian **A**, **B**, **C** dan **D**, yang manakah mengepam darah ke dalam arteri pulmonari?*

10. The diagram shows a longitudinal section of the human heart.  
*Rajah menunjukkan suatu keratan membujur jantung manusia.*

P  
R

Which of the labeled parts, **A**, **B**, **C** or **D**, pumps blood to the lung?  
*Antara bahagian berlabel **A**, **B**, **C** dan **D**, yang manakah mengepam darah ke peparu?*

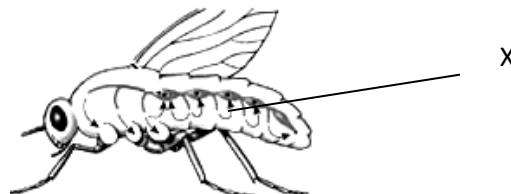
11. The diagram shows gills of a fish  
*Rajah menunjukkan insang ikan*

F  
R

Which part **A**, **B**, **C** or **D** has the highest rate of gaseous exchange?  
*Antara bahagian **A**, **B**, **C** dan **D**, yang manakah mempunyai kadar pertukaran gas yang paling tinggi?*

12. The diagram shows an open circulatory system of an arthropod .  
*Rajah menunjukkan sistem peredaran terbuka seekor artropoda*

P  
R

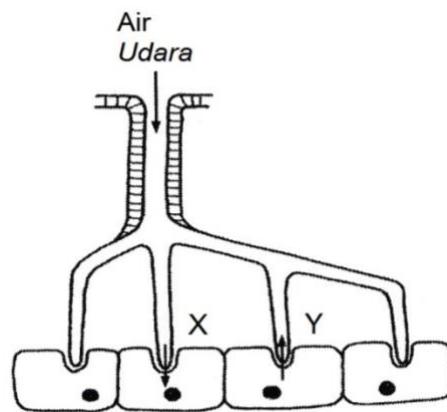


What is the colourless fluid found in X ?  
*Apakah cecair tidak berwarna yang terdapat dalam X?*

- A Lymph fluid / Bendalir limfa
- B Plasma / Plasma
- C Haemolymph / Hemolimfa
- D Interstitial fluid / Bendalir tisu

13. The diagram shows parts of the tracheal system of insects.  
*Rajah menunjukkan sebahagian dari sistem trakea pada serangga*

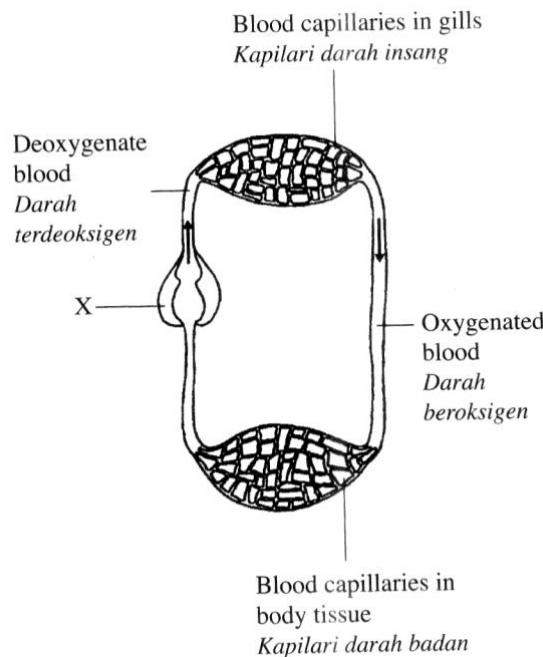
F  
R



What are substances X and Y?  
*Apakah bahan X dan Y?*

	X	Y
A	Oxygen Oksigen	Carbon dioxide Karbon dioksida
B	Carbon dioxide Karbon dioksida	Oxygen Oksigen
C	Oxygen Oksigen	Water Air
D	Water Air	Oxygen Oksigen

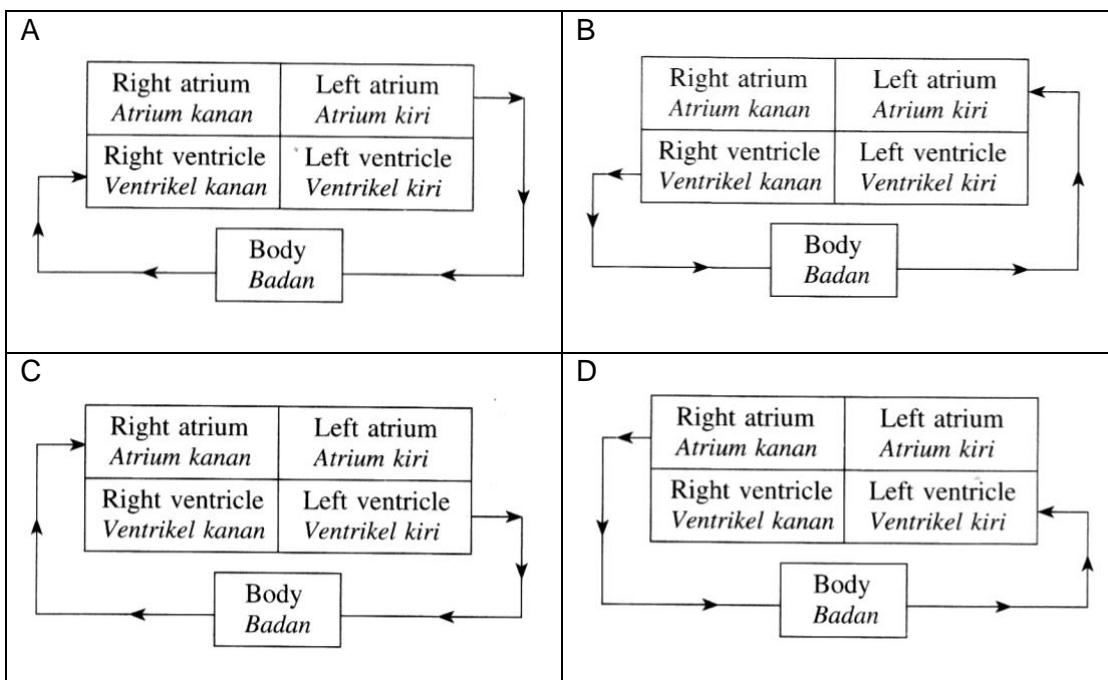
14. The diagram shows the circulatory system of a fish.  
*Rajah mununjukkan sistem peredaran darah ikan.*

F  
R

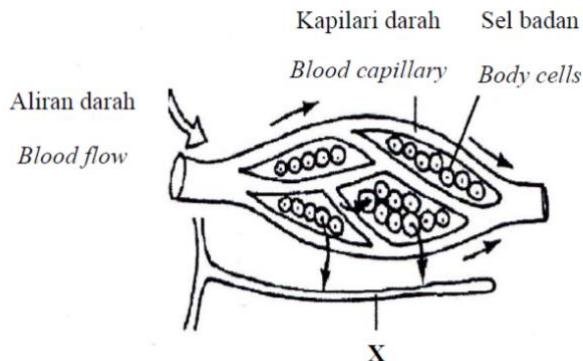
What is organ X?

- |   |   |
|---|---|
| <p><b>A</b> Lung / Peparu</p> <p><b>C</b> Kidney / Ginjal</p> | <p><b>B</b> Stomach / Perut</p> <p><b>D</b> Heart / Jantung</p> |
|---|---|
15. A student steps on a rusty iron nail while playing football in a field.  
 What treatment should be given to the student?  
 Seorang murid terpijak paku besi karat semasa bermain bola di padang  
 Apakah rawatan yang harus diberikan kepada murid itu?
- Polio vaccine injection  
*Suntikan vaksin polio*
  - Typhoid vaccine injection  
*Suntikan vaksin typhoid*
  - Diphtheria serum injection  
*Suntikan vaksin difteria*
  - Antitetanus serum injection  
*Suntikan vaksin antitetanus*

16. Which schematic diagram shows the systemic circulatory system?  
*Rajah yang manakah yang menunjukkan sistem peredaran sistemik?*

A  
S

17. Diagram shows capillaries, tissues and vessel X.  
*Rajah menunjukkan kapilari darah, tisu dan salur X*

P  
R

- A** Blood / Darah
- B** Plasma / plasma
- C** Lymph / Bendalir limfa
- D** Interstitial fluid / Cecair intertis

18. A gardener experiences non-stop bleeding after hurting his foot while gardening.  
 A What will happen if his blood is unable to clot.

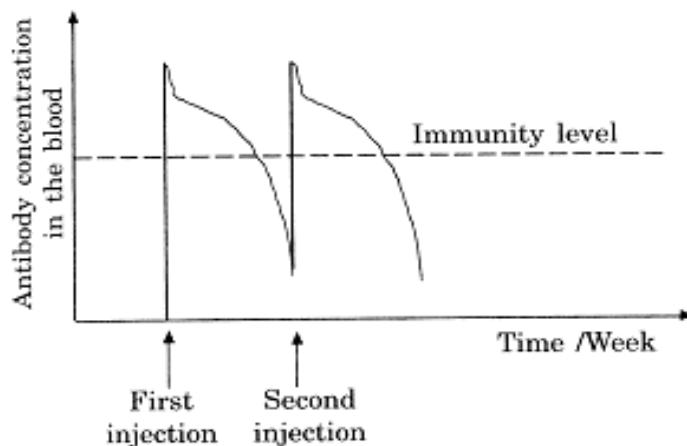
R Seorang pekebun mengalami pendarahan tidak henti setelah kakinya tercedera semasa berkebun.

Apakah akan terjadi jika darahnya tidak dapat membeku?

- A Blood pressure decreases  
*Tekanan darah menurun*
- B Blood capillaries enlarge  
*Kapilari darah membesar*
- C The rate of heart beat increases  
*Kadar denyutan jantung bertambah*
- D The rate of respiration increases  
*Kadar respirasi bertambah*

19. The diagram shows the concentration of antibody in the blood after two injections of antiserum.

F Rajah menunjukkan kepekatan antibody dalam darah selepas dua suntikan antiserum



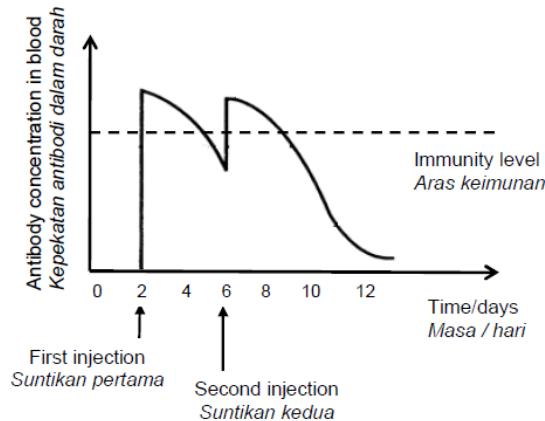
What type of immunity is shown in the diagram?

Apakah jenis keimunan yang ditunjukkan oleh graf dalam rajah ?

- A Acquired active immunity  
*Keimunan aktif buatan*
- B Acquired passive immunity  
*Keimunan pasif buatan*
- C Natural active immunity  
*Keimunan aktif semulajadi*
- D Natural passive immunity  
*Keimunan pasif semulajadi*

20. The diagram shows the concentration of antibodies in a patient's blood after being immunized

A Rajah menunjukkan kepekatan kepekatan antibodi dalam darah pesakit selepas diberi immunisasi



Which of the following is **true** about the immunity shown?

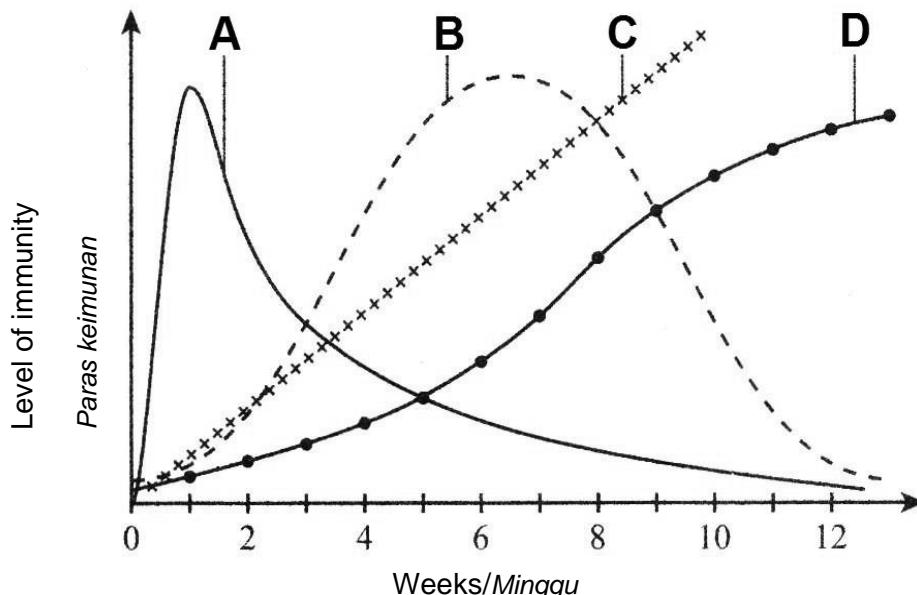
Antara yang berikut, yang manakah **benar** tentang keimunan yang ditunjukkan ?

- I. It gives temporary protection  
*la memberi perlindungan sementara*
- II. Antiserum is injected into the patient's body  
*Antiserum disuntik dalam badan pesakit*
- III. It gives immediate immunity against the disease  
*la memberi keimunan sementara menentang penyakit*
- IV. White blood cells are stimulated to produce antibody  
*Sel darah putih dirangsang untuk menghasilkan antibodi*

<b>A</b>	II and III only
<b>B</b>	I, II and III only
<b>C</b>	II, III and IV only
<b>D</b>	I, II, III and IV

21. The graph in the diagram shows several types of immunities  
*Graf dalam rajah menunjukkan beberapa jenis keimunan.*

A     S Which one best represents passive immunity?  
*Yang mana satukah yang paling baik mewakili keimunan pasif?*

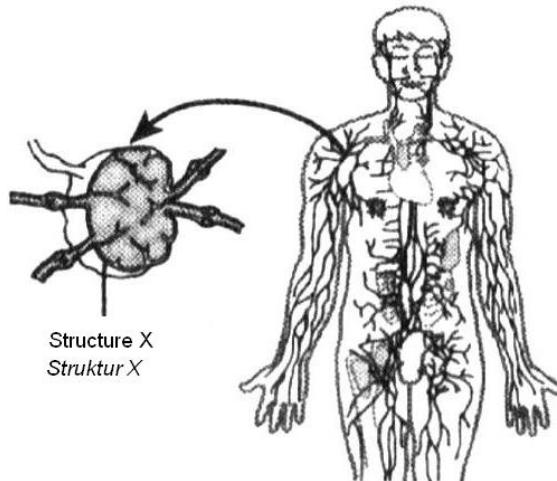


22. Which hereditary disease occurs due to lack of certain clotting factors in the blood?

P     S *Penyakit keturunan yang manakah yang berlaku akibat kekurangan faktor pembekuan darah tertentu di dalam darah?*

<b>A</b>	Embolism <i>Embolisme</i>
<b>B</b>	Thrombosis <i>Trombosis</i>
<b>C</b>	Haemophilia <i>Hemofilia</i>
<b>D</b>	Arteriosclerosis <i>Arteriosklerosis</i>

23. The diagram shows the lymphatic system.  
*Rajah menunjukkan sistem limfa.*

P  
T

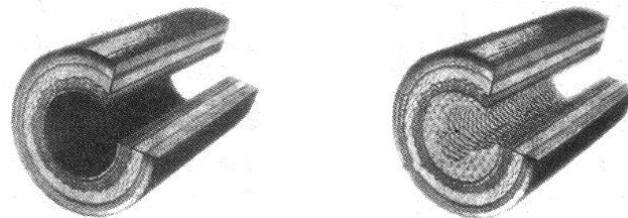
Which of the following are functions of structure X?  
*Antara berikut manakah merupakan fungsi struktur X?*

- I It filters out foreign particles  
*ia menapis keluar partikel asing.*
  - II Macrophages in X engulf and destroy bacteria  
*Makrofaj di X mengepung dan memusnahkan bakteria.*
  - III Lymphocytes in X produce antibodies to destroy antigens  
*Limfosit di X menghasilkan antibody untuk memusnahkan antigen.*
  - IV It prevents accumulation of tissue fluid  
*ia menghalang pengumpulan cecair tisu.*
- A** I and III only  
**B** I, II and III only  
**C** I, II and IV only  
**D** II, III and IV only

- 24 The diagram shows a cross-section of the coronary artery of individuals X and Y.  
*Rajah menunjukkan suatu keratan rentas arteri koronari bagi individu X dan individu Y.*

F

S



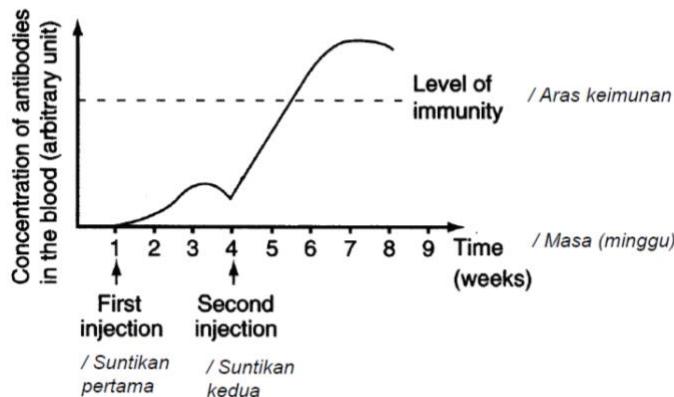
Individual X  
*Individu X*

Individual Y  
*Individu Y*

Which food should be avoided by individual Y?  
*Makanan manakah yang perlu dielakkan oleh individu Y?*

- A Fish / Ikan
- B Bread / Roti
- C Orange / Oren
- D Beef burger / Burger daging

- 25 Graph show a type of immunity.  
*Graf menunjukkan sejenis keimunan*

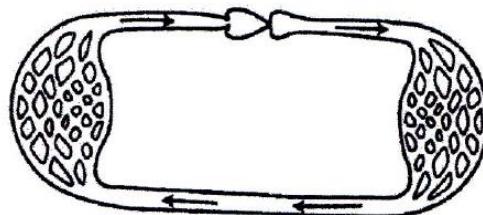
A  
S

Which of the following statements is true about the graph?  
*Antara pernyataan berikut, yang manakah benar tentang graf tersebut?*

- A Both injections contain serum that can raise antibody level  
*Kedua-dua suntikan mengandungi serum yang boleh meningkatkan aras antibodi*
- B Second injection is required to boost level of immunity  
*Suntikan kedua diperlukan untuk meningkatkan aras keimunan*
- C Both injections contains pathogen which control production of antibody  
*Kedua-dua suntikan mengandungi patogen yang mengawal penghasilan antibodi*
- D Second injection contains higher level of antibody.  
*Suntikan kedua mengandungi aras antibodi yang lebih tinggi*

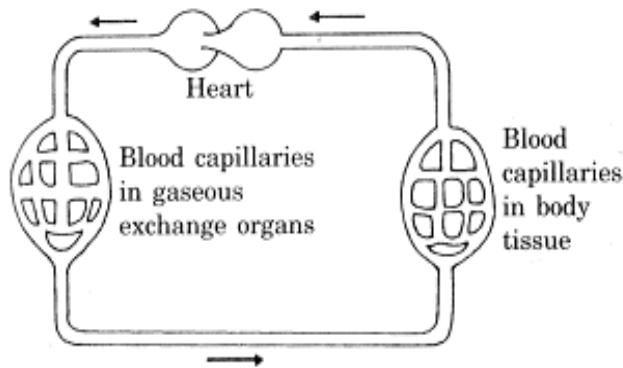
- 26 Which type of immunity is obtained by injecting antiserum into the body?  
*Apakah jenis keimunan yang akan diperoleh dengan menyuntik antiserum ke dalam badan*
- P  
R
- A Passive artificial immunity  
*Keimunan pasif buatan*
  - B Passive natural immunity  
*Keimunan pasif semula jadi*
  - C Active artificial acquired immunity  
*Keimunan aktif buatan*
  - D Active natural acquired immunity  
*Keimunan aktif semula jadi*

27. Diagram shows a type of a circulatory system  
*Rajah menunjukkan sejenis sistem peredaran darah*

P  
S

- |  |   |
|--|---|
| <b>A</b> Fish / Ikan<br><b>C</b> Bird / Burung | <b>B</b> Frog / Katak<br><b>D</b> Worm / Cacing |
|--|---|

28. The diagram shows a blood circulatory system of an animal.  
*Rajah menunjukkan sistem peredaran darah bagi suatu haiwan*

A  
S

Which of the characteristics is true about the blood circulatory system both in man and the animal in the diagram?

*Antara ciri-ciri berikut yang manakah benar tentang S sistem peredaran darah manusia dan haiwan pada rajah di atas*

- A** Heart pumps out a mixture of oxygenated and deoxygenated blood  
*Jantung mengepam campuran darah beroksigen dan terdeoksigen*
- B** Blood enters the gaseous exchange organ at low pressure  
*Darah yang memasuki organ pertukaran gas bertekanan rendah*
- C** It is a double blood circulatory system  
*Merupakan sistem peredaran darah ganda dua*
- D** It is a closed blood circulatory system  
*Merupakan sistem peredaran darah tertutup*

