RAVI MATHS TUITION CENTRE , WHATSAPP - 8056206308

Time : 100 Mins **BIOLOGY TEST 39 BODY FLUIDS AND CIRCULATION 1** **Marks : 400**

1. The figure given below shows three stages in the cardiac cycle.

Which of the following sequences is correct regarding this?
a) 2,3,1 b) 1,2,3 c) 2,1,3 d) 3,1,2

2. Read the following statements and select the correct ones
(i) Nodal tissue is specialised cardiac musculature in human heart which has the ability to generate action potential due to an external stimuli
(ii) Position of SAN - right corner of right atrium
(iii) Position of AVN - right corner of ventricle
(iv) AV bundle continues from AVN
(v) Purkinje fibres are modified cardiac muscle fibres that originate from the atrioventricular node and spread into the two ventricles.
a) (i) and (ii) b) (i) and (iii) c) (ii), (iv) and (v) d) All of these

3. Child death may occur in the marriage of _____ .
a) Rh^- man and Rh^+ woman b) Rh^+ man and Rh^+ woman c) Rh^+ man and Rh^- woman
d) Rh^- man and Rh^- woman

4. Excessively high heart rate (> 180) can reduce cardiac output because
a) blood is moving too fast through the lungs to pick up enough oxygen
b) it tires out the heart muscles and so they pump slower
c) it reduces the time for ventricular filling which reduces stroke volume
d) the PR-interval increases which leads to longer ventricular diastole and shorter ventricular systole

5. What would be the heart rate of a person if the cardiac output is 5 L, blood volume in the ventricles at the end of diastole is 100 ml- and at the end of ventricular systole is 50 ml _____ .
a) 75 beats per minute b) 100 beats per minute c) 125 beats per minute d) 50 beats per minute

6. Heart sound which is longer is
a) lub b) dup c) both equal d) sometimes (a) and sometimes (b).

7. The cardiac impulse is initiated and conducted further upto ventricle. The correct sequence of conduction of impulse is

a)

SA Node	AV Node	Purkinje fibre	AV Bundle

b)

SA Node	Purkinje fibre	AV Node	AV Bundle

c)

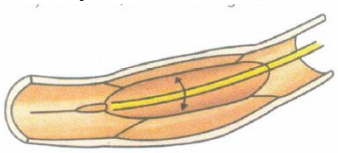
SA Node	AV Node	AV Bundle	Purkinje fibre

d)

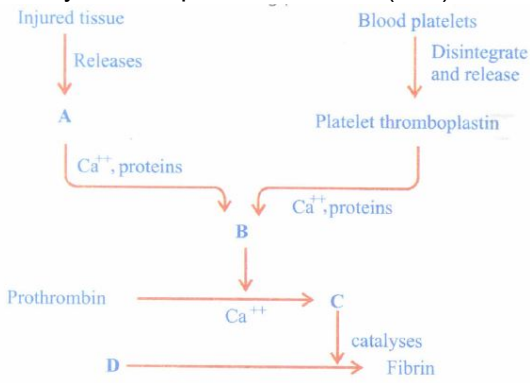
SA Node	Purkinje fibre	AV Bundle	AV Node

8. Arteries are best defined as the vessels which_____
a) supply oxygenated blood to the different organs
b) break up into capillaries which reunite to form one visceral organ
c) break up into capillaries which reunite to form a vein
d) carry blood from one visceral organ to another visceral organ

9. The most active phagocytic white blood cells are_____
   a) neutrophils and eosinophils b) lymphocytes and macrophages c) eosinophils and lymphocytes
   d) neutrophils and monocytes
10. Which is the principal cation in the plasma of the blood?
   a) Magnesium b) Sodium c) Potassium d) Calcium
11. Coagulation will not be affected in the absence of factor
   a) VII b) XII c) VIII d) VI
12. Consider the following statements (A-C) each with one or two blanks.
   (A) __(i)__are the most abundant cells (60-65 percent) of the total WBCs and ill are the least (0.5-1 percent) among them.
   (B) Platelets are cell fragments produced from__(3)__
   (C) During clot formation, fibers are formed by the conversion of inactive_(4)_in the plasma by the enzyme _(5)__
   Which one of the following options, gives the correct fill ups for the respective blank numbers from (1) to (5) in the statements.
   a) (1)-Neutrophils, (2)-basophils, (4)-fibrinogens, (5)-thrombin
   b) (3)-mast cells, (4)-thrombokinase, (5)-prothrombin c) (3)-megakaryocytes, (4)-prothrombin, (5)-thrombin
   d) (1)-Basophils, (2)-neutrophils, (3)-reticulocytes
13. Bundle of His is a network of____
   a) nerve fibres found throughout the heart b) muscle fibres distributed throughout the heart walls
   c) muscle fibres found only in the ventricle wall d) nerve fibres distributed in ventricles
14. The given figure shows an angiogram of the coronary blood vessel. Which one of the following statements correctly describes, what is being done?



   a) It is a coronary artery which has a cancerous growth that is being removed.
   b) It is a coronary artery which is blocked by a plaque and the same is being cracked
   c) It is a coronary vein in which the defective valves are being opened.
   d) It is a coronary vein blocked by a parasite (blood fluke) that is being removed.
15. Impulse of heart beat originates from___
   a) S. A. node b) A.V. node c) Vagus nerve d) Cardiac nerve
16. Identify the components labelled (A-D) in the given flow chart of the blood clotting process.



a)

A	B	C	D
Thromboplastin	Prothrombinase	Thrombin	Fibrinogen

b)

A	B	C	D
Fibrinogen	Thrombin	Prothrombinase	Thromboplastin

c)

A	B	C	D
Prothrombinase	Fibrinogen	Thromboplastin	Thrombin

d)

A	B	C	D
Thrombin	Thromboplastin	Fibrinogen	Prothrombinase

17. Which one of the following statements is incorrect?

GOOGLE & DOWNLOAD FOR MORE PAPERS

BLOGGER LINK (DOWNLOAD IMAGE)

https://www.ravitestpapers.in/

WEBSITE LINK (DOWNLOAD PDF)

https://ravitestpapers.com/

DON'T DELAY JOIN TODAY MY PAID WHATSAPP GROUP

FEES FOR ONE YEAR TILL EXAM

CBSE GROUP FEES FOR 6TH TO 9TH RS.1000			
CBSE 10TH RS.1750		CBSE 11TH RS.1500	CBSE SCI 12TH RS.1750
NEET 2025	NEET 11	JEE 2025	JEE 11
RS.2750	RS.2500	RS.2750	RS.2500
TN 10TH	TN 11TH	TH 12TH	
RS.1500	RS.1500	RS.1500	

UNLIMITED CUSTOMIZED TEST PAPERS & NOTES

UPLOAD IN MY PAID WHATSAPP GROUP

RAVI MATHS TUITION CENTER, CHENNAI

WHATSAPP – 8056206308

CENTER CLASS/HOME TUITION/ONLINE CLASS

a) The presence of nonrespiratory air sacs, increases the efficiency of respiration in birds.
b) In insects, circulating body fluids serve to distribute oxygen to tissues.
c) The principle of countercurrent flow facilitates efficient respiration in gills of fishes.
d) The residual area in lungs slightly decreases the efficiency of respiration in mammals.

18. Pacemaker is situated in the
a) wall of right atrium b) interauricular septum c) interventricular septum d) wall of left atrium.

19. Consider the following four statements (i) - (iv) and select the correct option.
(i) SA node is natural pacemaker of heart.
(ii) Human heart has inter-auricular foramen.
(iii) Right atrioventricular valve is a semilunar valve.
(iv) Normal systolic and diastolic pressure of humans is 120 and 60 mm Hg respectively.

a)

(i)	(ii)	(iii)	(iv)
F	F	T	F

b)

(i)	(ii)	(iii)	(iv)
F	F	T	T

c)

(i)	(ii)	(iii)	(iv)
T	T	F	T

d)

(i)	(ii)	(iii)	(iv)
T	F	F	F

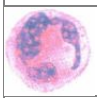
20. Which of the following chambers of the heart has the thickest muscular wall?
a) Left atrium b) Right atrium c) Right ventricle d) Left ventricle

21. Adult human RBCs are enucleate. Which of the following statement(s) is/are most appropriate explanation for this feature?
(1) They do not need to reproduce
(2) They are somatic cells
(3) They do not metabolize
(4) All their internal space is available for oxygen transport
a) Only 4 b) Only 1 c) 1, 3 and 4 d) 2 and 3

22. Read the following statements and select the correct option.
Statement 1: The SA node acts as pacemaker.
Statement 2: The SA node is located in the wall of the right atrium near the interatrial septum.
a) Both statements 1 and 2 are correct b) Statement 1 is correct but statement 2 is incorrect
c) Statement 1 is incorrect but statement 2 is correct d) Both statements 1 and 2 are incorrect

23. Which of the following match is correct?

a)

Structure	Percentage	Function
	0.3 -0.5	Phagocytic

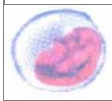
b)

Structure	Percentage	Function
	0.5 - 1.0	Secrete histamine and serotonin

c)

Structure	Percentage	Function
	30-40	Defence against parasites

d)

Structure	Percentage	Function
	30-40	Allergic reactions

24. The blood cancer is known as____
a) leukemia b) thrombosis c) haemolysis d) haemophilia

25. What is correct for blood group 'O'?
a) No antigens but both a and b antibodies are present b) A antigen and b antibody
c) Antigen and antibody both absent d) A and B antigens and a, b antibodies

26. Match column I with column II and select the correct option from the codes given below.

	Column-I		Column-II
A	Superior vena cava	(i)	Carries deoxygenated blood to lungs
B	Inferior vena cava	(ii)	Carries oxygenated blood from lungs
C	Pulmonary artery	(iii)	Brings deoxygenated blood from lower part of body to right atrium
D	Pulmonary vein	(iv)	Bring deoxygenated blood from upper part of body to right atrium

a) A - (ii), B - (iv),C - (iii), D - (i) b) A - (iv), B - (i), C - (ii), D - (iii) c) A - (iv), B - (iii), C - (i), D - (ii)
d) A - (iv), B - (i), C - (iii), D - (ii)

27. The lymph serves to____
a) transport oxygen to the brain b) transport carbon dioxide to the lungs
c) return the interstitial fluid to the blood d) return the WBCs and RBCs to the lymph nodes

28. In which of the following situations, there is a risk factor for children acquiring erythroblastosis foetalis?
a) Mother is Rh -ve and father is Rh -ve. b) Mother is Rh -ve and father is Rh +ve.
c) Mother is Rh +ve and father is Rh +v d) Mother is Rh +ve and father is Rh -ve.

29. Which of the following is correct about human heart?
a) The volume of both atria > the volume of both ventricles
b) The volume of both ventricles > the volume of both atria
c) The volume of both atria = the volume of both ventricles
d) Ventricles are upper chambers and atria are lower chambers in our heart

30. Given below are four statements (i-iv) regarding human blood circulatory system
(i) Arteries are thick-walled and have narrow lumen as compared to veins.
(ii) Angina is acute chest pain when the blood circulation to the brain is reduced.
(iii) Persons with blood group AB can donate blood to any person with any blood group under ABO system.
(iv) Calcium ions play a very important role in blood clotting.
Which two of the above statements are correct?
a) (i) and (iv) b) (i) and (ii) c) (ii) and (iii) d) (iii) and (iv)

31. Which one of the following has an open circulatory system?
a) Periplaneta b) Hirudinaria c) Octopus d) Pheretima

32. Which of the following parts of heart first receives deoxygenated blood?
a) Right ventricle b) Left auricle c) Right auricle d) Left ventricle

33. Which type of white blood cells are concerned with the release of histamine and natural anticoagulant heparin?
a) Monocytes b) Neutrophils c) Basophils d) Eosinophils

34. Clumping of RBC may occur when blood of one person is mixed with serum or blood of another person. This is due to
a) antigen-antibody reaction b) antitoxin-antibody reaction c) antigen-antigen reaction
d) antibody-antibody reaction.

35. Rate of heartbeat is determined by
a) Purkinje fibres b) papillary muscles c) AV-node d) SA-node.

36. Antigens are present_____
a) inside the nucleus b) on cell surface c) inside the cytoplasm d) on nuclear membrane

37. Which of the following correctly explains a phase/event in cardiac cycle in a standard electrocardiogram?
a) QRS complex indicates atrial contraction. b) QRS complex indicates ventricular contraction
c) Time between S and T represents atrial systole d) P-wave indicates beginning of ventricular contraction.

38. Which one of the following is incorrect for 'atherosclerosis'?
a) Constriction of arterial lumen reduces the blood flow
b) Loss of dilation ability of the arterial wall and its rupture
c) Cholesterol deposition at the inner wall of the artery d) None of these

39. Match the items given in Column I with those in Column II and select the correct option given below:

Column I	Column II
(A) Tricuspid value	(i) Between left atrium and left ventricle
(B) Bicuspid value	(ii) Between right ventricle and pulmonary artery
(C) Semilunar value	(iii) Between right atrium and right vent.ricle

a)

A	B	C
(i)	(ii)	(iii)

b)

A	B	C
(i)	(iii)	(ii)

c)

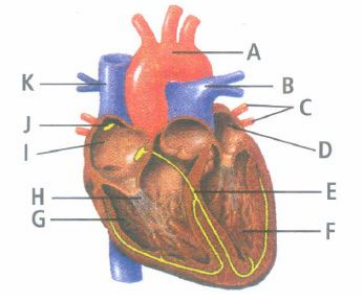
A	B	C
(iii)	(ii)	(ii)

d)

A	B	C
(ii)	(iii)	(iii)

40. The hepatic portal vein drains blood to liver from:
    a) Heart b) Stomach c) Kidneys d) Intestine

41. The given figure shows the vertical section of human heart. Identify the parts labelled as A to K



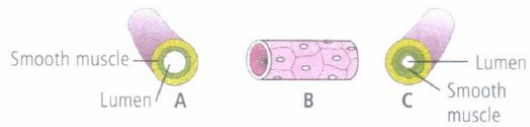
    a)
    A-Aorta, B-Pulmonary vein, C-Pulmonary arteries, D-Left ventricle, E-Semilunar valves, F-Left auricle, G-Right auricle, H-Superior vena cava, I-Right ventricle, J-Tricuspid valves, K-Inferior vena cava
    b)
    A-Aorta, B-Pulmonary artery, C-Pulmonary veins, D-Left auricle, E-Bundle of His, F-Left ventricle, G-Right ventricle, H-Chordae tendineae, I-Right auricle, J-Sino-atrial node, K - Vena cava
    c)
    A-Aorta, B-Superior vena cava, C-Inferior vena cava, D-Right ventricle, E-Bundle of His, F-Right auricle, G-Left auricle, H-Pulmonary vein, I-Riqht ventricle, J-Sino-atrial node, K-Pulmonary artery
    d)
    A-Aorta, B-Superior vena cava, C-Inferior vena cava, D-Left ventricle, E-Semilunar valves, F-Heft auricle, G-Right auricle, H-Pulmonary artery, I-Riqht ventricle, J-Tricuspid valves, K-Pulmonary vein

42. The rate of heartbeat is regulated by the integrated activity of inhibiting and accelerating effects occurring in which part of the brain?
    a) Cerebellum b) Diencephalon c) Medulla oblongata d) Pons Varolii

43. The correct route through which pulse-making impulse travels in the heart is_____
    a) AV node →Bundle of His →SA node → purkinje fibres → Heart muscles
    b) AV node →SA node → purkinje fibres → Bundle of His →Heart muscles
    c) SAnode →Purkinje fibres → Bundle of His → AVnode → Heart muscles
    d) SA node→ AV node →Bundle of His→purkinje fibres →Heart muscles

44. Which one of the following plasma proteins is involved in the coagulation of blood?
    a) Albumin b) Serum amylase c) Globulin d) Fibrinogen

45. Given below are the figures of blood vessels. Identify them and select the correct option.



a)

A	B	C
Capillary	Vein	Artery

b)

A	B	C
Artery	Capillary	Vein

c)

A	B	C
Vein	Capillary	Artery

d)

A	B	C
Vein	Artery	Capillary

46. The haemoglobin of a hurnan foetus_____
    a) has a lower affinity for oxygen than that of the adult b) its affinity for oxygen is the same as that of an adult
    c) has only 2 protein subunits instead of 4 d) has a higher affinity for oxygen than that of an adult

47. The given figure is the ECG of a normal human. Which one of its components is correctly interpreted below?

a) Complex QRS - one complete pulse b) Peak T - initiation of total cardiac contraction
c) Peak P and peak R together - systolic and diastolic blood pressures
d) Peak P- initiation of left atrial contraction only

48. Assertion: Type 'O' blood group individuals are called 'universal donors'.
Reason: RBCs of 'O' blood group have both 'A' and 'B' surface antigens.
a) If both assertion and reason are true and reason is the correct explanation of assertion.
b) If both assertionand reason are true but reason is not the correct explanation of assertion.
c) If assertion is true but reason is false. d) If both assertion and reason are false.

49. Match column I with column II and select the correct option from the codes given below.

	Column-I		**Column-II**
A	Heart failure	(i)	Heart muscle is suddenly damaged by an inadequate blood supply
B	Cardiac arrest	(ii)	Chest pain due to inadequate O_2 reaching the heart muscles
C	Heart attack	(iii)	Atherosclerosis
D	Coronary artery disease (CAD	(iv)	Heart not pumping blood effectively enough to meet the needs of the body
E	Angina pectoris	(v)	Heart stops beating

a) A-(iv), B-(v), C-(i), D-(iii), E-(ii) b) A-(v), B-(iv), C-(i), D-(iii), E-(ii) c) A-(iv), B-(v), C-(i), D-(ii), E-(iii)
d) A-(v), B-(iv), C-(ii), D-(iii), E-(i)

50. Which statement is true for WBC?
a) Non-nucleated b) Its deficiency causes cancer c) Manufactured only in thymus
d) Can squeeze through blood capillaries

51. Match the items given in Column I with those in Column II and select the correct option given below:

Column I	**Column II**
(A) Fibrinogen	(i) Osmotic balance
(B) Globulin	(ii) Blood clotting
(C) Albumin	(iii) Defence mechanism

a)

A	B	C
(i)	(iii)	(ii)

b)

A	B	C
(i)	(ii)	(iii)

c)

A	B	C
(iii)	(ii)	(i)

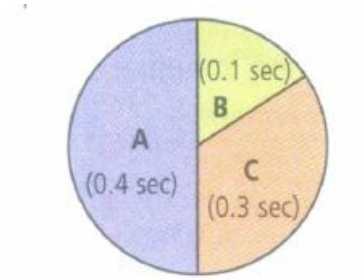
d)

A	B	C
(ii)	(iii)	(i)

52. In ECG, P-R interval corresponds to:
a) time delay in A-V node b) SeA nodal conduction time c) increased ventricular contraction
d) time interval between onset of ventricular contraction

53. ECG depicts the depolarisation and repolarisation processes during the cardiac cycle. In the ECG of a normal healthy individual one of the following waves is not represented.
a) Depolarisation of atria b) Repolarisation of atria c) Depolarisation of ventricles
d) Repolarisation of ventricles

54. In the given figure the durations of the events of the cardiac cycle are given. Identify these events and select the correct option.



a)

A	B	C
Auricular systole	Joint diastole	Ventricular systole

b)

A	B	C
Ventricular systole	Joint diastole	Auricular systole

c)

A	B	C
Ventricular systole	Auricular systole	Joint diastole

d)

A	B	C
Joint diastole	Auricular systole	Ventricular systole

55. Read the following statements and choose the correct option

Statement 1: Atria receive blood from all parts of the body which subsequently flows to ventricles.

Statement 2: Action potential generated at sino-atrial node passes from atria to ventricles.

a) Action mentioned in Statement 1 is dependent on action mentioned in Statement 2

b) Action mentioned in Statement 2 is dependent on action mentioned in Statement 1

c) Actions mentioned in Statements 1 and 2 are independent of each other

d) Actions mentioned in Statements 1 and 2 are synchronous

56. Which of the following statements is/are incorrect about lymph?

(i) Lymph is colourful as it has haemoglobin but no RBC.

(ii) It contains specialised lymphocytes which are responsible for immunity of the body.

(iii) Lymph is an important carrier for nutrients and hormones.

(iv) Fats are absorbed through lymph in the lacteals present in the intestinal villi.

a) (i) only b) (iii) and (iv) c) (ii) and (iii) d) (iv) only

57. Splenic artery arise from____

a) anterior mesenteric artery b) coeliac artery (or celiac artery) c) posterior mesenteric artery

d) intestinal artery

58. Which of the following statements is correct?

a) The T-wave in an ECG represents excitation of ventricles

b) The sum of P and T waves in a given time period can determine the heart beat rate of an individual.

c) The end of the P-wave marks the end of the systole

d) In a standard ECG, a person is connected to the machine with three electrical leads.

59. Prothrombin required for blood clotting is produced in

a) stomach b) liver c) spleen d) pancreas

60. During the process of blood coagulation, vitamin K helps in

a) the formation of thromboplastin b) the conversion of fibrinogen to fibrin

c) the conversion of prothrombin to thrombin d) the formation of prothrombin.

61. Match the terms given under column 'A' with their functions given under column 'B' and select the answer from the options given below:

	Column-I		Column-II
A	Lymphatic system	(i)	Carries oxygenated blood
B	Pulmonary vein	(ii)	Immune response
C	Thrombocytes	(iii)	To drain back the tissue fluid to the circulatory system
D	Lymphocytes	(iv)	Coagulation of blood

a) A-ii, B-i, C-iii, D-iv b) A-iii, B-i, C-iv, D-ii c) A-iii, B-i, C-ii, D-iv d) A-ii, B-i, C-iii, D-iv

62. In which one of the following pairs, two terms represent the same thing?
a) Atrioventricular node - pacemaker b) Lymphocyte - erythrocyte c) Plasma - serum
d) Mitral valve - bicuspid valve

63. Which of the following statements are incorrect?
(i) Leucocytes disintegrate in spleen and liver.
(ii) RBCs, WBCs and blood platelets are produced by bone marrow
(iii) Neutrophils bring about destruction and detoxification of toxins of protein origin
(iv) Important function of lymphocytes is to produce antibodies.
a) (i) and (ii) b) (i) and (iv) c) (i) and (iii) d) (ii) and (iii)

64. Chordae tendineae are found in
a) ventricles of brain b) joints of legs c) ventricles of heart d) atria of heart

65. Assertion: Sino-atrial node (SAN) is called the pacemaker.
Reason: SAN generates the maximum number of action potentials and is responsible for initiating and maintaining the rhythmic contractions of the heart.
a) If both assertion and reason are true and reason is the correct explanation of assertion.
b) If both assertion and reason are true but reason is not the correct explanation of assertion.
c) If assertion is true but reason is false. d) If both assertion and reason are false.

66. Match the types of WBC listed under column I with the shape of nucleus given under column II and select the correct option from codes given below.

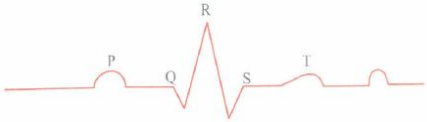
	Column-I		column-II
A	Neutrophils	(i)	Kidney-shaped
B	Eosinophils	(ii)	S-shaped
C	Basophils	(iii)	3 to 5 lobes
D	Monocytes	(iv)	2 lobes
		(v)	Disc-shaped

a) A-(iii), B- (v), C-(i), D-(ii) b) A-(v), B-(iii), C-(i) D-(iv) c) A-(ii), B-(i), C-(v), D-(iii)
d) A-(iii), B-(iv), C-(ii),D-(i)

67. Which of the following is the diagrammatic representation of standard electrocardiogram (ECG)?
a) 

b) 

c) 

d) 

68. Match column I with column II and select the correct option from the codes given below

	Column I (Plasma protein)		Column II (Functions)
A	Fibrinogen	(i)	Defence mechanism
B	Globulins	(ii)	Osmotic balance
C	Albumins	(iii)	Coagulation of blood

a) A-(iii), B-(i), C-(ii) b) A-(i), B-(iii), C-(ii) c) A-(iii), B-(ii), C-(i) d) A-(ii), B-(i), C-(iii)

69. 'Bundle of His, is a part of which one of the following organs in humans?
a) Brain b) Heart c) Kidney d) pancreas

70. Prothrombin, which helps in clotting of blood, is released by
a) monocytes b) erythrocytes c) lymphocytes d) blood platelets.

71. A vein possesses a large lumen because___

a) tunica media and tunica externa form a single coat b) tunica intema and tunica media form a single coat
c) tunica interna, tunica media and tunica externa are thin d) tunica media is a thin coat

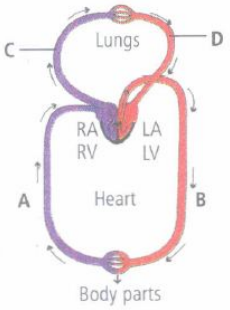
72. Compared to blood our lymph has _____ .
a) plasma without proteins b) more WBCs and no RBCs c) more RBCs and less WBCs d) no plasma

73. Which of the following options represents correct systemic circulation in human being?
a) Left ventricle $\xrightarrow[Blood]{Deoxygenated}$ Tissues $\xrightarrow[Blood]{Oxygenated}$ Right ventricle
b) Right ventricle $\xrightarrow[Blood]{Oxygenated}$ Tissues $\xrightarrow[Blood]{Deoxygenated}$ Right auricle
c) Left ventricle $\xrightarrow[Blood]{Deoxygenated}$ Tissues $\xrightarrow[Blood]{Oxygenated}$ Right auricle
d) Left ventricle $\xrightarrow[Blood]{Oxygenated}$ Tissues $\xrightarrow[Blood]{Deoxygenated}$ Right auricle

74. pH of blood
a) is greater than 9 b) ranges between 7-8 c) is less than 7 d) none of these

75. The thickening of walls of arteries is called____
a) arthritis b) atherosclerosis c) anaeurysm d) Both (a) and (c)

76. What is the nature of blood passing through blood vessels A, B, C and D respectively?



a)

A	B	C	D
Deoxygenated	Oxygenated	Deoxygenated	Oxygenated

b)

A	B	C	D
Deoxygenated	Deoxygenated	Oxygenated	Oxygenated

c)

A	B	C	D
Oxygenated	Oxygenated	Deoxygenated	Deoxygenated

d)

A	B	C	D
Oxygenated	Deoxygenated	Oxygenated	Deoxygenated

77. Assertion: Left atrium has the thickest muscles.
Reason: Right atrium receives blood from the lungs
a) If both assertion and reason are true and reason is the correct explanation of assertion.
b) If both assertion and reason are true but reason is not the correct explanation of assertion.
c) If assertion is true but reason is false d) If both assertion and reason are false

78. The problem of electrical discontinuity caused in the normal heart by the connective tissue separating the atria from the ventricles is solved by
a)
coordinating electrical activity in the atria with electrical activity in the ventricles by connecting them via the bundle of His
b) having the A-V node function as a secondary pacemaker c) having an ectopic pacemaker

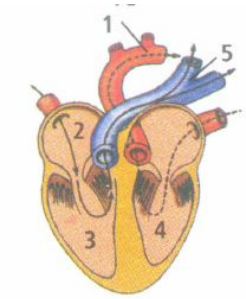
d)
coordinating electrical activity in the atria with electrical activity in the ventricles by connecting them via the vagus nerve

79. Doctors use stethoscope to hear the sounds produced during each cardiac cycle. The second sound is heard when___
a) Ventricular wall vibrate due to gushing in of blood from atria
b) Semilunar valves close down after the blood flows into vessels from ventricles
c) AV node receives signal from SA node d) AV valves open up

80. Which of the following is not main function of lymph glands?
a) Forming WBC b) Forming antibodies c) Forming RBC d) Destroying bacteria

81. Which one of the following is correct?
a) Serum = Blood + Fibrinogen b) Lymph = plasma + RBC + WBC c) Blood = Plasma + RBC + WBC
d) Plasma = Blood - Lymphocytes

82. In the given figure of the heart which of the labelled part (1,2,3,4,5) carries oxygenated blood?



a) 1, 2, 3 and 4 b) 1 and 5 c) 1 and 4 d) 3 and 5

83. Blood pressure in the mammalian aorta is maximum during_____
a) Diastole of the right ventricle b) Systole of the left ventricle c) Diastole of the right atrium
d) Systole of the left atrium

84. Read the following statements and select the correct option
Statement 1: Lymphatic capillaries are free and blind at one end
Statement 2: Lymph does not flow in a circular manner
a) Both statements 1 and 2 are correct b) Statement 1 is correct but statement 2 is incorrect
c) Statement 1 is incorrect but statement 2 is correct d) Both statements 1 and 2 are incorrect

85. What would be the cardiac output of a person having 72 heart beats per minute and a stroke volume of 50 mL?
a) 360 mL b) 3600 mL c) 7200 mL d) 5000 mL

86. Which of the following cells does not exhibit phagocytic activity
a) Monocytes b) Neutrophil c) Basophil d) Macrophage

87. A person with blood group A requires blood The blood group which can be given is____
a) A and B b) A and AB c) A and O d) A,B, AB and O

88. Read the following statements carefully.
(i) In fishes, the heart pumps out deoxygenated blood which is oxygenated by the gills and supplied to the body parts from where deoxygenated blood is returned to the heart.
(ii) The openings of the right and the left ventricles into pulmonary artery and aorta respectively are provided with the mitral valves.
(iii) The nodal musculature has the ability to generate action potentials without any external stimuli, i.e. it is autoexcitable.
(iv) The T-wave of ECG represents depolarisation of the ventricles.
Which of the above two statements are incorrect?
a) (i) and (iii) b) (ii) and (iv) c) (i) and (ii) d) (iii) and (iv)

89. Assertion : Lymph in lymphatic system is known as tissue fluid.
Reason: It consists of plasma proteins, RBCs and WBCs.

a) If both assertion and reason are true and reaso is the correct explanation of assertion.

b) If both assertion and reason are true but reason is not the correct explanation of assertion.

c) If assertion is true but reason is false d) If both assertion and reason are false

90. Which one of the following statements is correct regarding blood pressure?
a) 130/90 mm Hg is considered high and requires treatment
b) 100/55 mm Hg is considered an ideal blood pressure c) 105/50 mm Hg makes one very active
d) 190/l10 mm Hg may harm vital organs like brain and kidney

91. Which of the following sequences is truly a systemic circulation pathway?
a) Right ventricle ⟶Pulmonary aorta ⟶Tissues ~ Pulmonary veins ⟶Left auricle
b) Right auricle ⟶Left ventricle ⟶Aorta ⟶Tissues ⟶Veins ⟶Right auricle
c) Left auricle ⟶Left ventricle ⟶Pulmonary aorta ⟶ Tissues ⟶ Right auricle
d) Left auricle ⟶ Left ventricle ⟶ Aorta ⟶ Arteries ⟶ Tissues ⟶ Veins ⟶ Right atrium

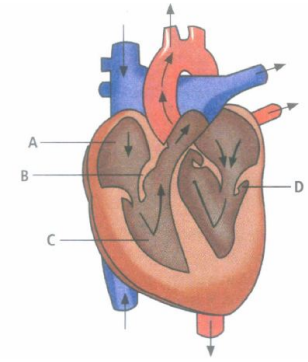
92. **Assertion**: RBCs are devoid of nucleus in most of the mammals
Reason : Entire cytoplasm of RBCs is filled with red coloured, iron containing complex protein called haemoglobin
a) If both assertion and reason are true and reason is the correct explanation of assertion.
b) If both assertion and reason are true but reason is not the correct explanation of assertion.
c) If assertion is assertion and but reason is false. d) If both assertion and reason are false.

93. Read the following statements and select the correct option
Statement 1: The 4-chambered heart of birds is superior to the 4-chambered heart of crocodiles
Statement 2: Crocodilian heart retains both systemic arches that join, causing mixing of blood in the dorsal aorta while avian heart has lost left systemic arch
a) Both statements 1 and 2 are correct b) Statement 1 is correct but statement 2 is incorrect
c) Statement 1 is incorrect but statement 2 is correct d) Both statements 1 and 2 are incorrect

94. Find the correct descending order of percentage proportion of leucocytes in human blood
a) Neutrophils→ Basophils→ Lymphocytes→ Acidophils (Eosinophils)→ Monocytes
b) Monocytes → Neutrophils → Lymphocytes → Acidophils → Basophils
c) Neutrophils → Lymphocytes → Monocytes → Acidophils → Basophils
d) Lymphocytes → Acidophils → Basophils → Neutrophils → Monocytes

95. Assertion: There are 72-75 heart beats per minute on an average when a person is performing normal work
Reason: One heart beat is completed in 0.8 second
a) If both assertion and reason are true and reason is the correct explanation of assertion.
b) If both assertion and reason are true but reason is not the correct explanation of assertion.
c) If assertion is true but reason is false d) If both assertion and reason are false

96. The given figure illustrates a section through the human heart.



Which labelled part represents the site for the generation of action potential in human heart?
a) A b) B c) C d) D

97. The antibodies are____
a) germs b) carbohydrates c) proteins d) lipids

98. Read the following statements and select the correct option.
Statement 1: Prothrombin is essential for blood clotting
Statement 2: Prothrombin is synthesised in the liver in the presence of Ca^{++}
a) Both statements 1 and 2 are correct b) Statement 1 is correct but statement 2 is incorrect
c) Statement 1 is incorrect but statement 2 is correct. d) Both statements 1 and 2 are incorrect

99. Assertion: Closed circulatory system is less efficient than open circulatory system.
Reason: The blood flow is slow in closed circulatory system than in open circulatory system.
a) If both assertion and reason are true and reason is the correct explanation of assertion.
b) If both assertion and reason are true but reason is not the correct explanation of assertion.
c) If assertion is true but reason is false. d) If both assertion and reason are false.

100. Conversion of fibrinogen to fibrin is catalysed by
a) thrombin b) prothrombin c) thromboplastin d) all of these.