BODY FLUIDS & CIRCULATION- MOCK TEST

1. Plasma protein (s) of blood that help in clotting

	a) Albumins	b) Fibrinogen	c) Globulin	d) Heparin		
2.	Plasma proteins of blood that help in osmotic balance					
	a) Albumins	b) Globulins	c) Fibrinogen	d) Serotonin		
3.	Read the following and select the correct combination					
	Animal	Heart chambers	Blood pur	nped out of heart		
	a) Shark	Two	Mixed blo	od		
	b) Lizard	Three	Deoxygen	ated blood		
	c) Frog	Three	Mixed blo	od		
	d) Rabbit	Four	Oxygenate	ed blood from right		
			Ventricle			
4.	Serum is					
	a) Blood minus blood	l cells	b) blood minus clo	otting factors		
	c) Plasma minus clot	ting factors	d) blood m	ninus RBC and plasma proteins		
5.	Serum differs from	the lymph in the abse	ence of			
	a) Erythrocytes		b) Leucoc	ytes and clotting factors		
	c) Leucocytes and all	oumins	d) Erythrocytes ar	nd globulins		
6						

6. Match the following

	A. Erythrocytopenia	1. Fall in platelet count
	B. Polycythemia	2. Fall in RBC count
	C. Leukocytopenia	3. Fall in WBC count
	D. Thrombocytopenia	4. Rise in RBC count
	a) A-3, B-4, C-2, D-1	b) A-2, B-4, C-3, D-1
	c) A-1, B-2, C-4, D-3	d) A-4, B-1, C-2, B-3
7.	Number of Red blood cells in a healthy ad	lult man
	a) 1.5 to 2 million / mm^3	b) 3.0 to 4.0 million / mm^3
	c) 5-7 million / mm ³	d) 4.5 to 5.5 million / mm^3
8.	Sites of erythropoiesis in adult man	
	a) Liver b) Spleen c) Red	bone marrow d) Yellow bone marrow
9.	Sites of RBC production in the early emb	ryonic development
	a) Liver	b) Spleen
	c) Yolk sac mesoderm	d) Red bone marrow
10.	Amount of hemoglobin in healthy adults	
	a) 5-10 mg / 100 ml of blood	b) 10-20 mg / 100 ml of blood
4	c) 12-16 gr / 100 ml of blood	d) 5-10 gr / 100 ml of blood
11.	Match the following	
	Valve	Location
	A. Tricuspid valve	i) Coronary sinus
	B. Bicuspid valve	ii) Left atrioventricular aperture
	C. Semi lunar valves	iii) Postcaval vein
	D. Eustachian valve	iv) Right atrioventricular aperture
	www.sakshie	ducation.com

	E. Thebesian valve		v) Aortic arch			
	a) A-iv, B-i, C-ii, D-iii, E-v		b) A-ii, B-i, C-iv, D-ii, E-iii			
	c) A-v, B-ii, C-i, D-iv	v, E-iii		d) A-iv, B-ii, O	C-v, D-iii, E-i	
12.	Average life span of	RBC in man				
	a) 100 days	b) 200 days	c) 150	days	d) 120 days	
13.	Graveyard of RBC					
	a) Spleen	b) Lymph nodes		c) Liver	d) Red bone m	arrow
14.	Match the following	ł				
	A. Sino – Atrial node	;	1. Post	erior right side	of interatrial se	ptum
	B. Atrioventricular no	ode	2. Wall of ventricles			
	C. Bundle of His		3. Wall of right atrium			
	D. Purkinje fibres	C	4. Inter ventricular septum			
	a) A-4, B-2, C-1, D-3		b) A-3, B-1, C-4, D-2			
	c) A-2, B-1, C-3, D-4		d) A-4	, B-1, C-2, D-3		
15.	Match the following					
	A. Basophils		1. Thro	omboplastin		
	B. Blood platelets		2. Dru	mstick body		
4	C. Monocytes		3. Heparin			
	D. Neutrophils		4. Reniform nucleus			
5	a) A-1, B-4, C-2, D-3	3	b) A-3	, B-1, C-4, D-2	2	
	c) A-4, B-1, C-3, D-2	2	d) A-2	, B-1, C-4, D-3		
16.	Reservoir of blood					
	a) Liver	b) Spleen	c) Red	bone marrow	d) Lymph nod	es

17.	Products produced by the break down of hemoglobin				
	a) bilirubin, biliverd	in	b) heparin, histamine	b) heparin, histamine	
	c) Albumin, globulin	1	d) fibrinogen, prothr	ombin	
18.	If a spleen is removed from an adult perso		son, what is the adver	rse affect of it?	
	a) RBC filtration will not occurs		b) Production of WB	BC decreases	
	c) Production of RB	C increases	d) Volume of hemog	lobin is increases	
19.	Read the following	and select the correct	the combination	C	
	a) Lub sound	- Closure semi	lunar valves	-Atrial systole	
	b) Dup sound	- Closure of tri	cuspid valve	- Ventricular systole	
	c) Lub sound	- Closure of Tr	ri, bicuspid valve	-Ventricular systole	
	d) Dup sound	- Closure of se	mi lunar valves	-Ventricular diastole	
20.	Membrane bounde	d cells organelles that	lost from erythrocyt	es in which of the	
	developmental stag	e of erythrocyte			
	a) proerythroblast	b) erythroblast	c) reticulocyte	d) myeloid stem cell	
21.	Most abundant of a	all leucocytes under no	ormal conditions		
	a) basophils	b) eosinophils	c) monocytes	d) neutrophils	
22.	Match the following	g			
4	A. Factor-I		1. Prothrombin		
	B. Factor-II		2. Ca ⁺² ions		
	C. Factor-III		3. Fibrinogen		
2	D. Factor-IV		4. Thromboplastin		
	a) A-1, B-3, C-2, D-	4	b) A-2, B-1, C-4, D-	3	
	c) A-4, B-2, C-1, D-	3	d) A-3, B-1, C-4, D-	2	

23.	Phagocytic leukocytes are				
	a) basophils, eosinop	ohils	b) monocyt	b) monocytes, neutrophils	
	c) Lymphocytes, basophils		d) all agran	ulocytes	
24.	Blood cells that seci	rete heparin, histami	ne, and serot	onin are	
	a) basophils	b) eosinophils	c) neutroph	ils	d) lymphocytes
25.	Blood cells that increase in number during allergy and infection				n
	a) eosinophils	b) basophils	c) neutroph	ils	d) monocytes
26.	Match the following	g with regard to ECG	, F		
	1. P-waveA. Depolarization of inter ventricular septum				
	2. Q-wave B. Rapid ventricular depolarization				zation
	3. T-wave	C. V	C. Ventricular repolarization		
	4. QRS complex		D. Atrial depolarization		
	a) 1-A, 2-C, 3-B, 4-I	,	b) 1	-D, 2-A, 3	-C, 4-B
	c) 1-B, 2-C, 3-D, 4-A	A	d) 1	-A, 2-B, 3-	-C, 4-D
27.	Blood cells responsi	ible for immune resp	onses		
	a) monocytes	b) lymphocytes	c) basophils	5	d) eosinophils
28.	Thrombocytes (plat	telets) are produced f	rom		
•	a) Stem cells of yello	ow bone marrow	b) Stem cel	ls of splee	n
	c) Megakaryocytes o	of red bone marrow	d) Kupffer	cells of liv	er
Ġ					

29.	Match the following			
	A. Thebesian valve		1. Systemic, pulmona	ary arches
	B. Eustachian valve		2. Left atrioventricular aperture	
	C. Tricuspid valve		3. Right atrioventricu	lar aperture
	D. Mitral valve		4. Post caval vein	
	E. Semi lunar valves		5. Left precaval	
	a) A-5, B-4, C-3, D-2	2, E-1	b) A-4, B-1, C-2, D-3	8, E-5
	c) A-2, B-1, C-3, D-2	e, E-5	d) A-3, B-1, C-2, D-4	I, E-5
30.	Blood cells help in c	oagulation of blood a	re	
	a) RBC	b) WBC	c) Platelets	d) Macrophages
31.	Physiological adapta	ation related to the blo	ood that can be notice	ed in people living at
	higher altitudes is			
	a) Thrombocytopenia		b) Anemia	
	c) Polycythemia		d) Erythropenia	
32.	Oedema occurs due	to		
	a) Fall in the levels of	f albumins	b) raise in levels of gl	lobulins
	c) plasmolysis		d) destruction	of WBC
33.	In human females so	ex chromatin body (D	rumstick body) is att	ached to the nucleus of
	a) basophils	b) eosinophils	c) neutrophils	d) monocytes
34.	Read the following a	and select the correct	combinations	
9	Blood cells	Nucleus	Function	
	A. Basophils	irregular lobed	play role in allergic re	eactions
	B. Eosinophils	bilobed	remove antigen-antib	ody complexes

www.sakshieducation.com

multilobed

phagocytosis

C. Neutrophils

	D. Monocytes	bean shaped	play role in immunol	ogical reaction
	a) A&B	b) B&C	c) C&D	d) A&D
35.	Cells of which of the	e following tissues do	not secrete matrix	
	a) Vascular tissue	b) muscular tissue		
	c) Osseous tissue	d) loose connective ti	ssue	
36.	Blood of mollusks is	light blue due to pre	sence of	
	a) Hemoglobin	b) haemocyar	nin	G
	c) chlorocruorin	d) vanadium o	chromogen	
37.	P^H of blood of a hea	lthy person	+	
	a) 6.2	b) 9.4	c) 7.4	d) 5.0
38.	Which of the follow	ing form acid-base bu	iffers of blood to main	ntain P ^H of blood
	a) Hemoglobin & oxy	yhaemoglobin	b) albumin and globu	ılin
	c) Oxygen and carbo	n dioxide	d) inorganic salts and	l hemoglobin
39.	Match the following			
	A. Factor-V		1. Fibrin stabilizing f	actor
	B. Factor-X		2. Hageman factor	
	C. Factor-XII		3. Stuart factor (powe	er factor)
4	D. Factor-XIII		4. Labile factor	
	a) A-4, B-1, C-2, D-3	3	b) A-1, B-2, C-3, D-4	4
5	c) A-2, B-3, C-4, D-1	l	d) A-4, B-3, C-2, D-1	1
40.	The percentage of to	otal volume occupied	by RBC is	

a) haematocrit b) diapedesis c) buffy coat d) erythropoiesis

41.	True statement from the following regarding \mathbf{P}^{H} of blood				
	a) Higher in veins ar	nd lower in arteries	b) same in both arter	ies and veins	
	c) Lower in veins an	d higher in arteries	d) same in certain pa	arts of body	
42.	Principal cat ion in	the plasma of blood			
	a) Calcium	b) Sodium	c) Potassium	d) Magnesium	
43.	Formation of eryth	rocytes of foetus (late	r stages) takes place i	in	
	a) Red bone marrow	,	b) Yellow bone man	row	
	c) Liver and spleen		d) Blood plasma		
44.	Percentage of destr	ruction of RBC in our	body daily is		
	a) 10	b) 20	c) 1	d) 5	
45.	Match the following	g			
	A. Polycythemia		1. Decrease in the nu	umber of RBC	
	B. Erythropenia		2. Abnormally low le	evels of WBC	
	C. Leucopenia		3. Abnormally large	number of RBC	
	D. Leukocytosis		4. Increase in the number of RBC		
			5. Increase in the number of WBC		
	a) A-1, B-4, C-5, D-3		b) A-3, B-2, C-4, D-5		
	c) A-3, B-4, C-2, D-5		d) A-4, B-1, C-2, D-5		
46.	Vertebrate with the	e largest RBC			
6	a) Whale	b) Gorilla	c) Amphiuma	d) Ostrich	
47.	RBC are nucleated	in which of following	animal		
	a) Pheretima	b) Rabbit	c) Frog	d) Camel	

48. **RBC** of most of mammals is

	a) Biconcave round and enucleated	b) biconvex, oval and enucleated
	c) Biconvex, spherical and nucleated	d) biconcave elliptical and nucleated
49.	Match the following	
	A. Larger P-wave	i. Myocardial infraction
	B. Flat T-wave	ii. Heart receives insufficient oxygen
	C. Enlarged Q-wave	iii. Hyperkalemia
	D. Enlarged R-wave	IV. Enlargement of atrium
		v. Enlargement of ventricles
	a) A-iv, B-ii, C-i, D-v	b) A-i, B-iv, C-iii, D-ii
	c) A-v, B-i, C-ii, D-iii	d) A-iv, B-i, C-ii, D-iii
50.	RBC of camel is	
	a) Oval nucleated	b) Oval enucleated
	c) Circular, biconvex and nucleated	d) circular, biconcave and nucleated
51.	Concave shape of RBC of mammals help	in

- a) Increasing volume relative to surface area
- b) Increasing surface area relative to volume
- c) Increasing both surface area and volume equally
- d) To accommodate more RBC in less space

52. Match the following

	A. Basophils	1. 0.5-1%		
	B. Neutrophils	2. 60-65%		
	C. Eosinophils	3. 2-3%		
	D. Lymphocytes	4. 20-25%		
	E. Monocytes	5. 6-8%		
	a) A-1, B-2, C-3, D-4, E-5	b) A-2, B-4, C-5, D-3, E-1		
	c) A-5, B-1, C-2, D-4, E-3	d) A-1, B-5, C-4, D-3, E-2		
53.	Blood of invertebrates differs from that	of vertebrates in the absence of		
	a) amoebocytes b) erythrocytes	c) haemoglobin d) plasma		
54.	RBC count is carried out by			
	a) Electro cardiogram	b) haemoglobinometer		
	b) haemocytometer d) sphygmomanometer			
55.	Human RBCs in 1.5% salt solution will			
	a) Burst b) shrink	c) swell up d) remain unaffected		
56.	In adults hemoglobin consists of			
	a) 1 α -chain and 1 β -chain	b) 2α -chains and 2β -chains		
	c) 3α -chains and 1β -chain	d) 1 α -chain and 3 β -chains		
57.	Anemia is caused due to iron deficiency i	S		
5	a) macrocytic b) microcytic	c) pernicious d) megaloblastic		

58. Read the following and select the correct combination

	Person with blood G	Froup	can do	onate blood to	can receive bl	ood from
	a) Blood group-A			O/A		AB/O
	b) Blood group- B			AB/B		O/B
	c) Blood group- O			O/AB		O/AB
	d) Blood group- AB			B/AB		O/AB
59.	Major cause of anen	nia is				
	a) Deficiency of Ca ⁺	2		b) Deficiency of Na ⁺		
	c) Deficiency of Fe ⁺²			d) Deficiency of Mg ⁺	2	
60.	An adverse effect as	sociated with p	polycyt	hemia is caused due t	0	
	a) Increased availabil	ity of oxygen		b) decrease in blood	volume	
	c) Increased cardiac of	output	C	c) increase in viscosit	ty of blood	
61.	The true cells of blo	od				
	a) RBC	b) WBC		c) Platelets	d) Thrombocy	tes
62.	Ratio between RBC	: WBC in man				
	a) 6:1	b) 60:1		c) 600:1	d) 6000:1	
63.	The largest of leuco	cytes in man				
4	a) neutrophils	b) lymphocyte	es	c) monocytes	d) acid	ophils
64.	Which of the followi	ing statements	are wr	ong?		
5	i) Leucocytes disinteg	grate in the sple	en and	liver.		
	ii) RBC, WBC and platelets are produced only in red bone marrow.					
	iii) Neutrophils bring	about destructi	on and	detoxification of prote	in toxins.	
	iv) The most importa	nt function of ly	ymphoc	eytes is to produce anti	bodies.	
	a) i and ii	b) i and iv	kchic	c) i and iii	d) ii and iii	
		www.Sa	IV21116	uucation.com		

65. Platelets (Thrombocytes) are considered not true cells because a) They are nucleated produced by mitosis b) They are non nucleated produced by fragmentation c) They are non nucleated produced by amitosis d) They are enucleated produced in red bone marrow 66. Life span of blood platelets in man b) a week to 10 days c) one year a) 1-2 months d) 100 days Liquid blood becomes Jelly like when it comes of blood vessel it is called **67.** a) haemolysis b) haemopoiesis c) thrombosis d) agglutination 68. Read the following and select the correct combination with regard to erythroblastosis fetalis Father blood group Mother blood group **Blood group of foetus** a) Rh+ve Rh+ve Rh+ve b) Rh-ve Rh+ve Rh+ve c) Rh+ve Rh+ve Rh-ve d) Rh+ve Rh-ve Rh+ve 69. Vitamin that plays a key role in blood clotting is a) calciferol b) ascorbic acid c) napthoquinone d) retinol 70. Which of the following are necessary for blood clotting? a) Ca^{+2} ions and vitamin K b) Mg^{+2} ions and vitamin A c) Na⁺ ions and vitamin C d) K^+ ions and vitamin D 71. Blood clotting protein, the fibrinogen is synthesized in a) Spleen b) Liver c) Red bone marrow d) Pancreas

72.	Which of the following is required for conversion of fibrinogen to fibrin?					
	a) Prothrobin	b) Thrombin	c) Ca ⁺²	d) thrombokinase		
73.	For conversion of in	nactive prothrombin i	into active thrombin,	it requires		
	a) Ca^{+2} ions, thrombo	oplastin	b) Na ⁺ ions, Fibrinogen			
	c) \mathbf{K}^+ ions, prothrom	nbinase	d) Mg ⁺² ions, Fibrin			
74.	Abnormal clot form	ned in the blood vesse	ls is			
	a) Thrombus	b) embolus	c) Ca ⁺²	d) Thrombokinase		
75.	A free floating clot	in the blood stream is	called			
	a) Thrombus	b) embolus	c) agglutinin	d) agglutinogen		
76.	Match the following					
	A. P-Q interval lengt	thens	1. Heart block			
	B. Elevated S-T segr	nent	2. Myocardial ischemia			
	C. Depressed S-T segment		3. In sufficient oxyge	en to heart muscles		
	D. Lengthened QT interval		4. Myocardial infract	tion		
	+		5. Rheumatic fever			
	a) A-4, B-1, C-3, D-:	5	b) A-5, B-1, C-3, D-4	4		
	c) A-1, B-2, C-4, D-3	5	d) A-5, -4, C-3, D-2			
77.	Which of the follow	ring substances, if intr	roduced into the blood	d stream, would cause		
5	a) Heparin	b) fibrinogen c) pro	thrombin d) th	nromboplastin		
78.	Which of the follow	ing does not undergo	clot?			
	a) Serum	b) plasma	c) lymph	d) tissue fluid		
79.	Which of the follow	ring is anticoagulant a	nd checks blood coag	gulation in blood vessels?		
	a) Heparin	b) Prothrombin	c) thromboplastin	d) globins		
	www.sakshieducation.com					

80. In blood banks blood is stored in packets; blood clotting in stored blood can be prevented by adding

- a) Sodium chloride
- c) Oxalates or citrates of Na or K
- b) ammonium chloride
- d) sodium hydroxide

81. Match the following

Blood Vessel

A. Coronary artery

a) A-4, B-1, C-3, D-2

- B. Carotid
- C. Phrenic
- D. Hepatic

Supplies blood to

- 1. Brain
- 2. Diaphragm
- 3. Hind limbs
- 4. Wall of heart
- 5. Liver
- b) A-5, B-2, C-3, D-2
- c) A-4, B-1, C-2, D-5 d) A-5, D-2, C-3, D-4

82. Select the wrong statement from the following

84.	Anticoagulant of	plant origin				
	a) Citric acid	b) Acetic acid	c) EDTA	d) HCl		
83.	Which of the foll	owing can be used to	an anticoagulant?			
	d) Vitamin K is re	equired for the synthesi	s of clotting factors	in liver		
	c) Hemolysins of	c) Hemolysins of saliva of mosquitoes cause immediate clotting of blood				
	b) Fibrinogen, prothrombin, thromboplastin are synthesized in liver cells					
	a) Na or K citrate	es are used as Ca ⁺² rem	overs to prevent blo	od clotting		

a) Coumadin b) hirudin c) lampredin d) haemolysins

85.	Match the following		
	A. Arteriosclerosis	1. Narrowing of arteries	
	B. Atherosclerosis	2. Severe heart pain	
	C. Angina pectoris	3. Thickening of walls of arteries	
	D. Myocardial infraction	4. Congestive heart failure	
		5. Heart attack	
	a) A-5, B-1, C-2, D-3	b) A-3, B-1, C-4, D-2	
	c) A-4, B-1, C-2, D-5	d) A-3, B-1, C-2, D-5	
86.	The chemical that causes deficiency of vi	itamin K that leads to prolonged bleeding in	
	cattle is		
	a) dicumarol b) benzene	c) mercury d) cyanide	
87.	Closed circulatory system is seen in		
	a) Arthropods b) Non cephalopod moll	usks c) Urochordates d) Vertebrates	
88.	Open circulatory system is seen in		
	a) Earthworm b) Cockroach	c) Rabbit d) Man	
89.	Single circulation is seen in		
	a) Fishes b) Frogs	c) Crocodiles d) Mammals	
90.	Match the following		
	A. Normal rate of heart beat	1. Tachycardia	
	B. Abnormal rate of heart beat	2. Bradycardia	
2	C. Decrease in heart rate	3. Arrhythmia	
	D. Increase in heart rate	4. Rhythmia	
	a) A-4, B-2, C-1, D-3	b) A-1, B-2, C-3, D-4	
	c) A-4, B-3, C-2, D-1	d) A-3, B-1, C-2, D-4	

91. In incomplete double circulation of amphibians and reptiles heart pumps

- a) Venous blood
- b) Mixed blood
- c) Oxygenated, deoxygenated blood separately
- d) Only pure blood

92. Heart of fishes is

a) branchial heart and venous heart

b) systemic heart and 2 chambered

- c) branchial heart and 3 chambered
- d) systemic heart and single chambered
- **93.** Assertion (A): Closed type of circulation is more effective and efficient than the open type of circulation.

Reason (R): The closed type of circulation enhances the speed and efficiency of pumping considerably.

- a) A and R are correct, R is the correct explanation of A
- b) A and R are correct, R is not the correct explanation of A
- c) A is correct but R is incorrect
- d) d) Both A and R are wrong

94. Blood vessel with more oxygenated blood in man

- a) Pulmonary artery b) Pulmonary vein
- c) Left systemic arch d) Dorsal aorta

95. The thickest layer in the wall of heart

- a) epicardium b) endocardium
- c) Myocardium d) endothelium
- 96. Cardiac muscles are present in this layer of heart wall

a) epicardium	b) myocardium	c) endocardium	d) pericardium
---------------	---------------	----------------	----------------

97. Papillary muscles arise from

a) Ventricles	b) Atria
---------------	----------

c) Interatrial septum d) Inter ventricular septum

98. Assertion (A): Heart of amphibians and reptiles pumps mixed blood to different parts of body.

Reason (R): Heart of amphibians and reptiles show incomplete double circulation.

- a) A and R are correct, R is the correct explanation of A
- b) A and R are correct, R is not the correct explanation of A
- c) A is correct but R is incorrect
- d) d) Both A and R are wrong3

99. Tendon like threads extend between papillary muscles and tricuspid, bicuspid valves are

d) Trabiculae tendinae

a) Columnae carneae	b) Chordae tendinae

c) Trabeculae carneae

100. Ductus arteriosus of foetal stage is represented in adults by

a) truncus arteriosus	b) pylangium
-----------------------	--------------

- c) ligamentum arteriosum d) conus arteriosus
- 101. Assertion (A): Right ventricle of mammalian heart is thicker than that of left ventricle.

Reason (R): Right ventricle of mammalian heart needs to pump blood to the extreme body parts with high force.

- a) A and R are correct, R is the correct explanation of A
- b) A and R are correct, R is not the correct explanation of A
- c) is correct but R is incorrect
- d) d) Both A and R are wrong

102. The pacemaker of heart is

a) Sinus venosus

b) AV node

c) SV node

d) SA node

103. Pace maker of the heart in man is located in

- a) Wall of left atrium near pulmonary veins
- b) Wall of right atrium near eustachian valve
- c) Wall of right atrium near thebesian valve
- d) Interventricular septum

104. What happens if pacemaker is made nonfunctional?

- a) Heart loses rhythmicity coordination in the heart beat
- b) Cardiac impulses neither generated nor coordinated
- c) Only ventricles show systole
- d) Only atria show systole

105. Assertion (A): Heart of fish is called venous heart.

Reason (R): Heart of fish contains only deoxygenated blood.

- a) A and R are correct, R is the correct explanation of A
- b) A and R are correct, R is not the correct explanation of A
- c) is correct but R is incorrect
- d) Both A and R are wrong

106. A-V node is located in

- a) Right atrium close to atrioventricular septum
- b) left atrium close to inter ventricular septum
- c) Inter ventricular septum

d) Right ventricle

107. Function of pace maker is

- a) To generate cardiac impulses and to maintain rhythm
- b) To generate minimum action potentials
- c) To create lub, dup sounds d) To pump blood

108. Assertion (A): The muscle fibers of SA node possess the highest rhythmicity among all cardiac muscle fibers.

Reason (R): SA node initiates the excitatory waves at the highest rate as it functions as pace maker.

- a) A and R are correct, R is the correct explanation of A
- b) A and R are correct, R is not the correct explanation of A
- c) is correct but R is incorrect
- d) Both A and R are wrong

109. Bundle of his is a

- a) Bundle of nerve fibres of interventricular septum
- b) Bundle of cardiac muscles of interventricular septum
- c) Part of conducting system of atria
- d) Cardiac muscles fibres in the wall of ventricles

110. Number of RBC in man increases if he lives at higher altitudes because

- a) There is more oxygen b) there is less oxygen
- c) There is low partial pressure of oxygen d) there is high partial pressure of oxygen

111. Universal donor blood group has

- a) No antigens b) no antibodies
- d) antigens only d) no antigens and antibodies

112. If in an experiment, an animal is made anemic, production of which hormone will be stimulated

a) Erythrocytin

b) Erythroblastin c) Erythropoietin d) Encephalin

113. Artificial pace maker is implanted subcutaneously and is connected to the heart in patients

- a) Having 90% blockage of the coronary arteries
- b) Having high blood pressure
- c) With irregularity in the heart rhythm
- d) Suffering from arteriosclerosis
- 114. Assertion (A): Saline water should not be given to the patients of hypertension.

Reason (R): Saline water causes vomiting and may drop blood pressure suddenly causing cardiac arrest.

- a) A and R are correct, R is the correct explanation of A
- b) A and R are correct, R is not the correct explanation of A
- c) is correct but R is incorrect
- d) d) Both A and R are wrong

115. Systolic pressure is higher than diastolic pressure because

- a) Arteries are contracted during systole
- b) Blood is pumped with high pressure during systole rather than diastole
- c) Arteries have narrow lumen
- d) Arteries have valves which resist the speed
- 116. Haemopoietic tissues starting from the embryonic development up to adult in a correct sequence
 - a) Yolk sac mesoderm, liver/spleen and red bone narrow
 - b) Lymph nodes, yellow bone narrow and red bone narrow
 - c) Spleen, lymph nodes and yellow bone narrow
 - d) Liver, spleen and mesoderm

117. Blood of earth worm differs from that of frog

- a) In the absence of haemoglobin
- b) In the absence of RBC
- c) In the presence of amoebocytes
- d) in the presence of urea
- 118. Assertion (A): WBCs accumulate at the site of wounds by diapedesis.

Reason (R): WBCs are the cells that fight against infection and protect the body from the action of microbes.

- a) A and R are correct, R is the correct explanation of A
- b) A and R are correct, R is not the correct explanation of A
- c) is correct but R is incorrect
- d) d) Both A and R are wrong

119. Formed elements of Pus

a) basophils	b) neutrophils	c) eosinophils	d) monocytes
		Internet in the second se	/ _

120. Lymph differs from the blood in the absence of

- a) RBC, WBC and glucose b) RBC, platelets and some plasma proteins
- c) CO₂, metabolites and lymphocytes d) Formed elements and plasma proteins

121. Pick out the odd one

a) Heparin b) Hirudin c) Warfarin d) Erythropoietin

122. Select the wrong statement from the following

- a) BP increases with the increase in cardiac output
- b) BP is inversely related to the elasticity of blood vessels
- c) Constriction of blood vessels decreases BP, where as dilation increases BP
- d) BP increases with advancing age after the age of 60 years

123.	Blood in blood banks is stored in packets, in which blood is prevented from clotting. It				
	can be achieved by the	addition of			
	a) Organic anticoagulant	5	b) citrates, oxal	lates	
	c) EDTA, Hypo solution		d) more numbe	r of platelets	
124.	Correct sequence of sta	ges of blood coag	ulation from the	following	
	a) Formation of fibrin, fo	rmation of fibrino	gen, formation of	f clot	
	b) Formation of prothron	bin, formation of	thrombin, format	tion of fibrino	gen, clot
	c) Formation of thrombo	kinase, formation of	of active thrombi	n, formation o	of fibrin, clot
	d) Formation of fibrin, fo	rmation of fibrino	gen, formation of	f clot	
125.	Serum differs from plas	sma in the absenc	e of		
	a) Blood clotting proteins	b) formed ele	ments c) RBC	d) WB	С
126.	The chief sites of formation of lymph in human body				
	a) Liver b)	Kidney	c) intestinal spa	aces	d) heart
127.	Lymph capillaries of intestinal villi are				
	a) Lacteals b)	Sinuses	c) Sinusoids	d) Coelomic	channels
128.	8. Correct sequence of layers in the heart wall of mammals				
	a) mediastinum, myocardium and endocardiumb) mediastinum, endocardium and myocardiumc) Pericardium, epicardium, myocardium and endocardium				
4					
C	d) Epicardium, exocardiu	ım, endocardium a	nd myocardium		
7					

129. Correct sequence of conduction of cardiac impulse in the heart of mammals

- a) SA node, AV node, bundle of His, purkinje fibres
- b) AV node, SA node, purkinje fibres, bundle of his
- c) Atria, AV node, SA node and ventricles
- d) Right atrium, SA node, AV node, left atrium

130. Select the wrong statement from the following

- a) Cardiac output is not constant but varies with the physical activity
- b) Cardiac output increases with the increase in rate of heart beat
- c) When cardiac output increases, then the stroke volume increases
- d) Cardiac output decreases with the reduction in body temperature during surgery

131. Match the following

- A. Sphygmomanometer
- B. Wintrobe tube 2. Cardiac output
- C. Stethoscope
- 3. Blood pressure

1. Haematocrit

4. Heart beat

a) A-3, B-1, C-4 b) A-2, B-3, C-4 c) A-1, B-2, C-3 d) A-4, B-3, C-1

132. Deposition of calcium, fat, cholesterol and fibrous tissues in the lumen of coronary artery, making it narrower is called

a) Angina pectoris b) Atherosclerosis c) Heart failure d) Heart attack

133. A symptom of acute chest pain appears when oxygen reaching the heart muscles is not enough is

a) Angina pectoris b) CAD c) Heart attack d) Heart failure

134. Study the following picture related to ECG and find out the abnormality that you have noticed.



a) Myocardial ischemia b) M

b) Myocardial infraction

c) Rheumatic fever

d) Myocardial damage

135. State of heart when is not pumping blood effectively enough to meet the needs of the body is

		Vieter Vieter	
a) Heart attack	b) Cardiac arrest	c) Heart failure	d) Angina
a) 110 and according			<i>w)</i>

136. When heart muscles are suddenly damaged by inadequate blood supply it is called

a) Heart attack	b) Cardiac arrest	c) Heart failure	d) Angina
-----------------	-------------------	------------------	-----------

137. Assertion (A): The cardiac output of an athlete will be much higher than that of an ordinary man.

Reason (R): The body has the ability to alter the stroke volume as well as cardiac output in order meet the oxygen requirement to the body.

- a) Both A and R are true and 'R' is correct explanation of A
- b) Both A and R are true and 'R' is not correct explanation of A
- c) A is false, R is true d) A is true, R is false
- **138.** Select the wrong statement from the following
 - a) SA node initiates cardiac cycle
 - b) Damage to AV node causes total heart block
 - c) The action potential in SA node is initiated mainly by the opening of $K^{\scriptscriptstyle +}$ ion channels
 - d) SA node can initiate excitatory waves at the highest rate

139. Select the correct statement from the following

a) If SA node fails; the AV node generates impulses in abnormal conditions

b) The nodal rhythm is insufficient to sustain life

c) AV node is capable of producing action potentials at the rate of 120 times per minute normally.

d) If there is any damage to the AV node, it can be rectified by SA node.

140. Correct sequence of blood flow in systemic circulation is

a) Right ventricle \rightarrow pulmonary artery \rightarrow lungs \rightarrow pulmonary veins \rightarrow left atrium

b) Left systemic arch \rightarrow body parts \rightarrow vena cava \rightarrow right atrium

c) Right atrium \rightarrow right ventricle \rightarrow left atrium \rightarrow left ventricle

d) Left atrium \rightarrow left ventricle \rightarrow left systemic arch \rightarrow lungs

141. Select the correct statement from the following

a) Stimulation of parasympathetic nervous system increases the rate of heart beat

b) Increased body temperature during fever increase heart beat

c) Heart beat is some what slower in adult female than that of male

d) The heart beat is slowest at birth and fastest in youth

142. Select wrong statement from the following

a) Systemic circulation provides oxygen and nutrient rich blood to organ systems

b) Pulmonary circulation provides blood rich in co_2 to lungs for oxygenation

c) Coronary system provides oxygen and nutrients rich blood to the heart wall

d) Hepatic portal system provides nutrient rich blood to the gut from the liver

143. Assertion (A): Heart of human beings is called myogenic.

Reason (R): Normal activities of the heart are regulated intrinsically by nodal tissue made up of cardiac muscles.

a) Both A and R are true and 'R' is correct explanation of A

- b) Both A and R are true and 'R' is not correct explanation of A
- c) A is false, R is true d) A is true, R is false

144. Cardiac output is increased by

- a) Parasympathetic signals b) adrena
- c) Hormones from adrenal cortex

b) adrenaline, noradrenalin

b) Cerebral hemispheres

d) Diencephalon

d) motor nerves

145. A special neural center in the brain that can moderate cardiac functions is

- a) Medulla oblongata
- c) Cerebellum
- 146. If blood pressure of a person in repeated checks is more than 120/80 the condition is called
 - a) Hypotension b) hypokalemia
 - c) hypertension
- d) hyperkalemia
- 147. Assertion (A): The first Rh^{+ve} child born to the mother of Rh^{-ve} blood group and father of Rh^{+ve} blood group is safe (not affected by HDNB).

Reason (**R**): Mother starts preparing antibodies against **R**h antigen in her blood just at the time of parturition of the first baby

a) Both A and R are true and 'R' is correct explanation of A

- b) Both A and R are true and 'R' is not correct explanation of A
- c) A is false, R is true d) A is true, R is false

148. Select the correct statement with respect to the lymph

a) Lymph is an extra cellular fluid without formed elements

b) Lymph is a tissue fluid formed from the blood in the intestinal spaces

c) Lymph has large number of lymphocytes and plasma proteins of high molecular weight

d) Lymph is involved in the exchange of nutrients and gases only between blood cells and plasma

149. Assertion (A): Sinoatrial node acts as a pace maker of the heart.

Reason (R): SA node is auto excitable, and can generate the maximum number of action potentials with out any external stimuli.

a) Both A and R are true and 'R' is correct explanation of A

- b) Both A and R are true and 'R' is not correct explanation of A
- c) A is false, R is true d) A is true, R is false

150. Select the correct statement from the following.

a) Atria and ventricles contract simultaneously during heart beat

b) Atria and ventricles relax simultaneously during heart beat

c) SAN generates action potentials so that right atrium contracts first; it is followed by left atrium

d) Ventricular systole causes the opening of semi lunar valves

151. Match the following

A. Basophils	1. Allergic reactions
B. Eosinophils	2. Immune responses
C. Monocytes	3. Heparin, histamine
D. Lymphocytes	4. Phagocytic cells
E. Thrombocytes	5. Blood clotting

E-4

b) A-5, B-2, C-4, D-1, E-3 d) A-2, B-3, C-5, D-4, E-1

152. Cardiac output is equal to

a) Stroke volume \times rate of heart beat

- b) Stroke volume/heart beat
- c) Reserve volume stroke volume
- d) End diastolic volume and systolic volume
- **153.** When heart beat at the rate of 72 times per minute, the time taken for the completion of cardiac cycle is

a)1 sec b) 1 minute c) 0.8 sec d)1.5 sec

154. Select the correct statement from the following

a) The blood group without antigens on the surface of RBCs is considered universal donor.

b) A person having blood group with all the types of antigens on the surface of RBCs is capable of receiving blood from any other person.

c) Person with blood group 'O' can donate his blood to persons of any other blood types and can receive blood group of any other type.

d) Person with blood group AB can donate blood to the person of same blood type as well as A and B.

155. Identify A, B, C & D in an order from the below diagram showing the conducting system of heart.

a) SAN, AVN, Bundle of His and Purkinje fibres.

- b) AVN, Bundle of His, Purkinje fibres and SAN.
- c) AVN, SAN, Purkinje fibres and Bundle of His.
- d) SAN, AVN, Purkinje fibres and Bundle of His.



.

• KEY:

				• KE	Y:			0	
1.b	2.a	3.c	4.c	5.b	6.b	7.d	8.c	9.c	10.c
11.d	12.d	13.a	14.b	15.b	16.b	17.a	18.a	19.c	20.c
21.d	22.d	23.b	24.a	25.a	26.b	27.b	28.c	29.a	30.c
31.c	32.a	33.c	43.b	35.a	36.b	37.c	38.b	39.d	40.a
41.c	42.b	43.c	44.d	45.b	46.c	47.c	48.a	49.a	50.b.
51.b	52.a	53.b	54.b	55.b	56.b	57.b	58.b	59.c	60.c
61.b	62.c	63.c	64.b	65.b	66.b	67.c	68.d	69.c	70.a
71.b	72.b	73.a	74.a	75.b	76.d	77.c	78.a	79.a	80.c
81.c	82.c	83.c	84.a	85.d	86.a	87.d	88.b	89.a	90.c
91.b	92.a	93.a	94.b	95.c	96.b	97.a	98.a	99.b	100.c
101.a	102.d	103.b	104.a	105.a	106.b	107.a	108.a	109.b	110.c
111.a	112.c	113.c	114.c	115.b	116.a	117.b	118.a	119.b	120.b
121.d	122.c	123.b	124.c	125.a	126.c	127.a	128.c	129.a	130.c
131.a	132.b	133.a	134.a	135.c	136.a	137.a	138.c	139.a	140.b
141.d	142.d	143.a	144.b	145.a	146.c	147.a	148.b	149.a	150.b
151.a	152.a	153.c	154.a	155.a					