

Time : 1 hour 15 Minute

STD 11 Science Biology
chapter Based Test

Total Marks : 40

SECTION A

* Choose The Right Answer From The Given Options.[1 Marks Each] [5]

1. Fastest distribution of some injectible material/ medicine and with no risk of any kind can be achieved by injecting it into the:
(A) Veins. (B) Arteries.
(C) Lymph vessels. (D) Muscles.
2. In humans, blood passes from the post caval to the diastolic right atrium of heart due to:
(A) Pressure difference between the post caval and atrium.
(B) Pushing open of the venous valves.
(C) Suction pull.
(D) Stimulation of the sino auricular node.
3. An adult human with average health has systolic and diastolic pressures as:
(A) 80mm Hg and 80mm Hg. (B) 70mm Hg and 120mm Hg.
(C) 120mm Hg and 80mm Hg. (D) 50mm Hg and 80mm Hg
4. Coronary artery disease (CAD) is often referred to as:
(A) Cardiac arrest. (B) Atherosclerosis.
(C) Heart failure. (D) None of these.
5. Which of the following statement/statements can be related to erythroblastosis foetalis?
(A) Severe anemia and jaundice to the baby.
(B) Can be avoided by giving anti-Rh antibodies to mother immediately after delivery of the first child.
(C) Rh-antibodies from the Rh -ve mother destroys foetal RBCs.
(D) All of the above.

* Answer The Following Questions In One Sentence.[1 Marks Each] [6]

6. Give the volume of blood for.
 - a. Stroke volume.
 - b. Cardiac output.
7. State the functions of the following in blood,
Fibrinogen.
8. Which artery carries deoxygenated blood?
9. It is seen that RBC count is more in the persons living at high altitudes. Indicate the reason behind this.

10. Why are some individuals/ persons known as Rh-positive and some others as Rh-negative?
11. Where does the cardiac impulse originate?

SECTION B

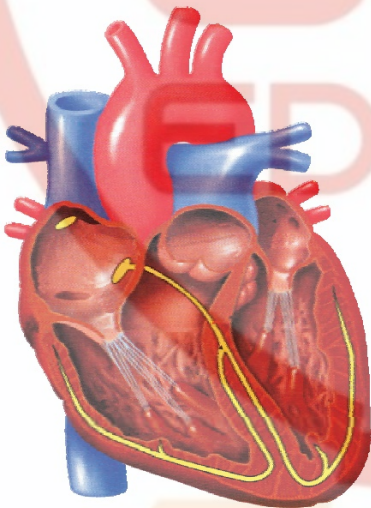
* Given Section consists of questions of 2 marks each.

[10]

1. The walls of ventricles are much thicker than atria. Explain.
2. How is heart failure different from cardiac arrest?
3. Differentiate between, Blood and Lymph.
4. Match Column I with Column II.

S. No	Column I	S. No	Column II
(a)	Neutrophils	1.	Allergic reactions.
(b)	Erythrocytes	2.	Inflammatory reactions.
(c)	Basophils	3.	Phagocytosis.
(d)	Eosinophils	4.	Transport of oxygen.

5. In the diagrammatic presentation of heart given below, mark and label, SAN, AVN, AV bundles, bundle of His and Purkinje fibres.



SECTION C

* Given Section consists of questions of 3 marks each.

[9]

1. Sumit, student of class XI when returned from school was told by his mother that his grandfather was complaining about some uneasiness. Sumit told his mother to take him to the doctor. The doctor tied a cuff around his arm and pumped air, then he slowly released the air. The handcuff was connected to a tube containing mercury. Doctor told Sumit that his grandfather is suffering from high blood pressure and put him on medication. The doctor also advised him to take precautions and rest and asked Sumit's mother to bring him for regular checkups.
 - i. What is meant by blood pressure?
 - ii. What is the harmful effect of blood pressure on health?
 - iii. Enumerate the range of normal and high blood pressure in human.
 - iv. What values are displayed by Sumit as a good grandson?

2. Write the features that distinguish between the two, Plasma and Serum.
3. An Rh⁻ woman is carrying an Rh⁺ foetus for the second time. Describe the consequences of Rh-incompatibility in this case

OR

Why is it necessary to check the Rh factor of the blood in a pregnant woman?

OR

What physiological circumstances lead to erythroblastosis foetalis?

SECTION E

* Given Section consists of questions of 5 marks each.

[10]

1. Match Column I with Column II

	Column I		Column II
a.	Eosinophils	i.	Coagulation
b.	RBC	ii.	Universal Recipient
c.	AB Group	iii.	Resist Infections
d.	Platelets	iv.	Contraction of Heart
e.	Systole	v.	Gas transport

2. Explain the advantage of the complete partition of ventricle among birds and mammals and hence leading to double circulation.

EDUCATION



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