CHAPTER -15: BODY FLUIDS AND CIRCULATION

I - Choose the Correct Answer

1. When body tissues are injured resulting in the loss of blood, the process of blood clot begins. The process of clotting is carried out by a network of thread like protein called

(a) Fibrin

(b) Thrombin

(c) Prothrombin

(d) Thrombokinase

2. The heart is protected by a double walled membranous structure called

(a) Pleura

(b) Procardium

(c) Pericardium

(d) Metacardium

3. In adult human, normal blood pressure is

(a) 100/80 mm Hg

(b) 80/120 mm Hg

(c) 100/120 mm Hg

(d) 120/80 mm Hg

4. Which of these structures prevent the back flow of blood from right ventricle to righr atria

(a) Aortic valve

(b) Pulmonary valve

(c) Bicuspide valve

(d) Tricuspide valve

5. **Assertion:** Type ‘O’ blood group individuals are called ‘universal donors’.

Reason: RBCs of ‘O’ blood group consists both ‘A’ and ‘B’ surface antigens.

a. Both Assertion and Reason are correct and Reason is the correct explanation for Assertion.

b. Both Assertion and Reason are correct and Reason is not the correct explanation for Assertion.

c. If assertion is true but the reason is false.

d. If assertion is false but the reason is true.

II Answer the following questions

1. Draw a standard ECG and explain different segment in it.

2. Why is AV node? Why this bundle essential for the conduction of cardiac impulse?

3.What is Lub and dubsound represents? Explain

4.How does CAD (atherosclerosis) affect the body?

5.Explain how RH factor compatibility is must in human beings.

6.Explain the steps involved in coagulation of blood.

7. Why SA node is called pacemaker of the heart?

8. Explain the working of the heart in the human body.

III Case based questions:

Blood is a special connective tissue consisting of a fluid matrix, plasma, and formed elements. Plasma is a straw coloured, viscous fluid constituting nearly 55 per cent of the blood. 90-92 per cent of plasma is water and proteins contribute 6-8 per cent of it. Fibrinogen, globulins and albumins are the major proteins. Fibrinogens are needed for clotting or coagulation of blood. Globulins primarily are involved in defence mechanisms of the body and the albumins help in osmotic balance.

1. Name the iron containing complex protein present in blood.

2. which are the two types of Leucocytes

3. What if number of thrombocytes are drastically reduced in blood?

4. Where are RBCs formed from an adult human?

5. Give reason – why erythrocytes are known as red blood cells?

Diagrams to practice

A) Human heart internal structure

B) Schematic plan of double circulation

C) ECG graph.