

Chapter – 15 | Body Fluids and Circulation

QUIZ-01

1. Blood is considered a special type of:

- A. Epithelial tissue
- B. Connective tissue
- C. Muscular tissue
- D. Nervous tissue (B)

Explanation : Blood has plasma as its fluid matrix and formed elements, so it is a special connective tissue.

2. Plasma constitutes nearly what percentage of blood?

- A. 25%
- B. 35%
- C. 45%
- D. 55% (D)

Explanation : Plasma is the straw-coloured fluid part of blood and forms about 55% of total blood.

3. Which plasma protein is mainly required for blood clotting?

- A. Albumin
- B. Globulin
- C. Fibrinogen
- D. Haemoglobin (C)

Explanation : Fibrinogen helps in coagulation of blood by forming fibrin threads during clot formation.

4. The most abundant cells in human blood are:

- A. RBCs
- B. WBCs
- C. Platelets
- D. Lymphocytes (A)

Explanation : Erythrocytes or RBCs are the most abundant formed elements in human blood.

5. The spleen is called the graveyard of:

- A. WBCs
- B. RBCs
- C. Platelets
- D. Plasma cells (B)

Explanation : RBCs have an average life span of about 120 days and are destroyed in the spleen.

6. Which blood group is called the universal donor?

- A. A
- B. B
- C. AB
- D. O (D)

Explanation : O blood group has no A or B antigens on RBCs, so it can donate blood to all ABO groups.

7. Erythroblastosis foetalis occurs due to incompatibility of:

- A. ABO blood group only
- B. Rh factor
- C. Haemoglobin level
- D. Platelet count (B)

Explanation : It may occur when an Rh-negative mother carries an Rh-positive foetus in subsequent pregnancies.

8. The pacemaker of the human heart is:

- A. AV node
- B. SA node
- C. Bundle of His
- D. Purkinje fibres (B)

Explanation : The sino-atrial node generates the maximum number of action potentials and maintains heart rhythm.

9. The duration of one cardiac cycle is about:

- A. 0.4 second
- B. 0.8 second
- C. 1.2 seconds
- D. 2.0 seconds (B)

Explanation : At an average heart rate of 72 beats per minute, one cardiac cycle lasts about 0.8 second.

10. The P-wave in ECG represents:

- A. Ventricular repolarization
- B. Atrial depolarization
- C. Ventricular depolarisation
- D. Closure of semilunar valves (B)

Explanation : The P-wave shows electrical excitation or depolarisation of the atria, leading to atrial contraction.