

Class XI Biology

Chapter 15: Body Fluids and Circulation

Set 1: 50 Multiple Choice Questions

- 1] The fluid matrix of blood is called –
a) Plasma b) Serum c) Lymph d) Haemoglobin
- 2] Percentage of plasma in total blood volume is approximately –
a) 45% b) 55% c) 65% d) 75%
- 3] Major proteins present in plasma are –
a) Fibrinogen, Globulin and Albumin
b) Haemoglobin and Myosin
c) Actin and Myosin
d) Keratin and Collagen
- 4] Plasma protein needed for clotting of blood –
a) Globulin b) Albumin c) Fibrinogen d) Haemoglobin
- 5] Serum is –
a) Plasma without clotting factors
b) Plasma with clotting factors
c) Only water
d) Only RBCs
- 6] The major component of formed elements is –
a) RBC b) WBC c) Platelets d) Plasma
- 7] Average number of RBCs in an adult male –
a) 1 million/mm³ b) 3 million/mm³ c) 5 million/mm³ d) 8 million/mm³
- 8] Average life span of human RBCs –
a) 60 days b) 90 days c) 120 days d) 150 days
- 9] RBCs are destroyed in the –
a) Liver b) Spleen c) Kidney d) Bone marrow
- 10] The “graveyard of RBCs” is –
a) Liver b) Spleen c) Kidney d) Heart
- 11] White blood cells are also called –
a) Erythrocytes b) Leucocytes c) Thrombocytes d) Cytocytes

- 12] Normal count of WBCs per mm^3 of blood –
a) 1 000–2 000 b) 6 000–8 000 c) 10 000–12 000 d) 15 000–20 000
- 13] The most abundant type of WBC –
a) Neutrophil b) Eosinophil c) Basophil d) Monocyte
- 14] Basophils secrete –
a) Histamine and Heparin b) Insulin c) Adrenaline d) Thyroxine
- 15] Phagocytic WBCs are –
a) Neutrophils and Monocytes
b) Basophils and Eosinophils
c) Lymphocytes and Monocytes
d) Basophils and Lymphocytes
- 16] Eosinophils help in –
a) Clotting of blood
b) Resisting infection and allergic reactions
c) Oxygen transport
d) Digestion
- 17] Lymphocytes are of how many types?
a) One b) Two c) Three d) Four
- 18] Platelets are fragments of –
a) Neutrophils b) Megakaryocytes c) RBCs d) Basophils
- 19] Platelets help in –
a) Transport b) Clotting c) Digestion d) Respiration
- 20] Universal donor blood group –
a) A b) B c) AB d) O
- 21] Universal recipient blood group –
a) A b) B c) AB d) O
- 22] Rh-positive means –
a) Rh antigen present b) Rh antigen absent c) Both d) None
- 23] Erythroblastosis foetalis occurs due to –
a) Rh incompatibility b) ABO mismatch c) Anaemia d) Leukaemia
- 24] Calcium ions are essential for –
a) Clotting b) Digestion c) Respiration d) Excretion
- 25] Fluid formed between tissue cells is called –
a) Plasma b) Lymph (Tissue fluid) c) Serum d) Sweat
- 26] Lymph contains –
a) RBC only b) WBC (especially lymphocytes) c) Platelets only d) All of these

- 27] Fats are absorbed through –
a) Capillaries b) Lacteals in villi c) Arteries d) Veins
- 28] Open circulatory system occurs in –
a) Arthropods and Molluscs b) Annelids c) Vertebrates d) Reptiles
- 29] The human heart is protected by –
a) Ribs b) Pericardium c) Lungs d) Diaphragm
- 30] The right atrium and right ventricle are separated by –
a) Tricuspid valve b) Bicuspid valve c) Septum d) Semilunar valve
- 31] The left atrium and left ventricle are separated by –
a) Bicuspid (Mitral) valve b) Tricuspid valve c) Semilunar valve d) Aortic valve
- 32] The pacemaker of the heart is –
a) Sino-atrial node (SAN) b) AV node c) Bundle of His d) Purkinje fibres
- 33] Average human heart rate –
a) 60 bpm b) 70–75 bpm c) 90 bpm d) 100 bpm
- 34] Duration of one cardiac cycle –
a) 0.5 s b) 0.8 s c) 1.0 s d) 1.2 s
- 35] Average stroke volume –
a) 50 mL b) 70 mL c) 90 mL d) 100 mL
- 36] Cardiac output in a healthy adult –
a) 3 L/min b) 4 L/min c) 5 L/min d) 7 L/min
- 37] First heart sound “lub” is produced by closure of –
a) Semilunar valves b) Tricuspid and Bicuspid valves c) Aortic valve d) All valves
- 38] Second heart sound “dub” is due to –
a) Closure of Semilunar valves b) Opening of valves c) Relaxation of atria d) Contraction of ventricles
- 39] P-wave of ECG represents –
a) Atrial depolarisation b) Ventricular depolarisation c) Repolarisation d) None
- 40] QRS complex represents –
a) Atrial systole b) Ventricular depolarisation (systole) c) Relaxation d) Both
- 41] T-wave indicates –
a) Repolarisation of ventricles b) Depolarisation c) Atrial contraction d) Ventricular contraction
- 42] Pulmonary circulation begins from –
a) Right atrium b) Right ventricle c) Left atrium d) Left ventricle

- 43] Systemic circulation begins from –
 a) Right atrium b) Right ventricle c) Left ventricle d) Left atrium
- 44] Hepatic portal vein carries blood from –
 a) Liver to intestine b) Intestine to liver c) Heart to liver d) Kidney to liver
- 45] Coronary circulation supplies blood to –
 a) Lungs b) Kidneys c) Heart muscle d) Liver
- 46] Heart is called myogenic because –
 a) It initiates its own contraction
 b) It needs external nerves
 c) It beats irregularly
 d) None
- 47] Sympathetic nerves cause –
 a) Increase in heart rate b) Decrease c) No effect d) Irregular beat
- 48] Parasympathetic nerves –
 a) Increase heart rate b) Decrease heart rate c) No effect d) Increase blood pressure
- 49] Hypertension means –
 a) Low blood pressure b) Normal c) High blood pressure (> 140/90 mm Hg) d) Zero
- 50] Angina pectoris occurs due to –
 a) Lack of oxygen to heart muscle b) Kidney failure c) Lung infection d) High blood sugar

✓ Answers – Set 1

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	a	2	b	3	a	4	c	5	a
6	a	7	c	8	c	9	b	10	b
11	b	12	b	13	a	14	a	15	a
16	b	17	b	18	b	19	b	20	d
21	c	22	a	23	a	24	a	25	b
26	b	27	b	28	a	29	b	30	a
31	a	32	a	33	b	34	b	35	b
36	c	37	b	38	a	39	a	40	b
41	a	42	b	43	c	44	b	45	c

46 a 47 a 48 b 49 c 50 a

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