CLASS XI BIO CH 15

Set 2 – 50 MCQs (Body Fluids and Circulation)

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1 Which of the following is the fluid part of blood without clotting factors?
a) Serum b) Plasma c) Lymph d) Cytoplasm

2 Which blood cell does not contain a nucleus?
a) RBC b) WBC c) Monocyte d) Lymphocyte

3 Haemoglobin is present in –
a) RBC b) WBC c) Platelets d) Plasma

4 Which of the following is not a formed element of blood?
a) RBC b) WBC c) Platelets d) Plasma

5 The percentage of formed elements in blood is approximately –
a) 25% b) 35% c) 45% d) 55%

6 Erythrocytes are formed in –
a) Liver b) Spleen c) Red bone marrow d) Kidney

7 Which of the following is a granulocyte?
a) Lymphocyte b) Monocyte c) Neutrophil d) All of these

8 Which WBC is least in number?
a) Neutrophil b) Eosinophil c) Basophil d) Monocyte

9 Which WBC secretes histamine and causes inflammation?
a) Basophil b) Eosinophil c) Neutrophil d) Monocyte

10 Which WBC helps in immunity?
a) Lymphocyte b) Eosinophil c) Basophil d) Neutrophil

11 Which is known as thrombocytes?
a) RBC b) WBC c) Platelets d) Plasma

12 Platelets are derived from –
a) Erythroblasts b) Megakaryocytes c) Monocytes d) Lymphocytes

13 The number of platelets per mm^3 of blood –
a) 15,000–35,000 b) 1,50,000–3,50,000 c) 10,000–12,000 d) 6,000–8,000

14 Which ion plays a vital role in blood clotting?
a) Na^+ b) K^+ c) Ca^{2+} d) Mg^{2+}

15 Which organ destroys old RBCs?
a) Liver b) Spleen c) Kidney d) Lungs

16 Blood without clotting factors is called –
a) Serum b) Plasma c) Lymph d) Water

17 Which of the following is not present in plasma?
a) Water b) Proteins c) RBC d) Glucose

18 Which of the following is called the body's "defence cells"?
a) RBC b) WBC c) Platelets d) None

19 Antibodies are mainly present in –
a) RBC b) Plasma c) Platelets d) None

20 The normal haemoglobin content in human blood is –
a) 5–8 g/100 mL b) 9–11 g/100 mL c) 12–16 g/100 mL d) 17–20 g/100 mL

21 Which blood group has both A and B antigens?
a) A b) B c) AB d) O

22 Which blood group has no antigens?
a) A b) B c) AB d) O

23 Which blood group has both anti-A and anti-B antibodies?
a) A b) B c) AB d) O

24 Rh factor is named after –
a) Rabbit b) Rhesus monkey c) Rat d) Rhinoceros

25 Rh-negative mother and Rh-positive foetus can cause –
a) Anaemia b) Erythroblastosis foetalis c) Leukopenia d) Hypertension

26 In blood clotting, prothrombin is converted into –
a) Fibrin b) Thrombin c) Fibrinogen d) None

27 The enzyme that converts fibrinogen into fibrin is –
a) Thrombin b) Pepsin c) Amylase d) Renin

28 Clotting of blood is prevented by –
a) Heparin b) Fibrin c) Calcium d) Platelets

29 Blood circulation is discovered by –
a) William Harvey b) Leeuwenhoek c) Aristotle d) Darwin

30 Lymph is formed from –
a) Plasma b) RBCs c) Water d) Platelets

31 Lymph is rich in –
a) RBC b) WBC (lymphocytes) c) Platelets d) None

32 Fats are absorbed into the lymph through –
a) Lacteals b) Capillaries c) Arteries d) Veins

33 Heart is made up of –
a) Skeletal muscles b) Smooth muscles c) Cardiac muscles d) Voluntary muscles

34 The heart is enclosed in –
a) Pleural membrane b) Pericardium c) Peritoneum d) None

35 The wall separating left and right atria is –
a) Interatrial septum b) Interventricular septum c) Atrio-ventricular septum d) None

36 Which valves prevent backflow of blood into atria?
a) Tricuspid and Bicuspid b) Semilunar c) Aortic d) None

37 Which valve prevents backflow from aorta to ventricle?
a) Aortic semilunar valve b) Pulmonary valve c) Tricuspid d) Bicuspid

38 The pacemaker of the heart is –
a) SAN b) AVN c) Bundle of His d) Purkinje fibres

39 The bundle of His divides into –
a) Two branches b) Three branches c) Four branches d) Many fibres

40 Average human heartbeat per minute –
a) 50 b) 70–75 c) 90 d) 100

41 Duration of one cardiac cycle is –
a) 0.6 s b) 0.8 s c) 1.0 s d) 1.2 s

42 Cardiac output =
a) Stroke volume × Heart rate b) Heart rate × Blood pressure c) Pulse rate × Volume d) None

43 Stroke volume is –
a) Volume of blood pumped per beat per ventricle
b) Volume of blood per minute
c) Volume of blood in arteries
d) Volume in lungs

44 First heart sound “lub” is caused by –
a) Closure of atrioventricular valves b) Closure of semilunar valves c) Opening of valves d) Ventricular contraction

45 Second heart sound “dub” is caused by –
a) Closure of semilunar valves b) Closure of bicuspid c) Opening of tricuspid d) Relaxation

46 P-wave of ECG represents –
a) Atrial depolarisation b) Ventricular depolarisation c) Repolarisation d) None

47️⃣ QRS complex represents –
a) Ventricular depolarisation b) Atrial repolarisation c) Ventricular repolarisation d) None

48️⃣ T-wave represents –
a) Repolarisation of ventricles b) Depolarisation of atria c) None d) Contraction of atria

49️⃣ Pulmonary circulation carries –
a) Deoxygenated blood to lungs b) Oxygenated blood to tissues c) Deoxygenated to tissues d) Oxygenated to lungs

50️⃣ Coronary arteries supply blood to –
a) Brain b) Heart muscles c) Liver d) Lungs

✅ Answers – Set 2

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	a	2	a	3	a	4	d	5	c
6	c	7	c	8	c	9	a	10	a
11	c	12	b	13	b	14	c	15	b
16	a	17	c	18	b	19	b	20	c
21	c	22	d	23	d	24	b	25	b
26	b	27	a	28	a	29	a	30	a
31	b	32	a	33	c	34	b	35	a
36	a	37	a	38	a	39	a	40	b
41	b	42	a	43	a	44	a	45	a
46	a	47	a	48	a	49	a	50	b
