**Karan Arora**  **R.L. Institute M: 9416974837**

**Subject: Biology**

**Topic: Body Fluids & Circulation**

**M.M. 320 COMPETITIVE TEST**  **Time: 60 Min.**

1. The amount of protein present in plasma of blood is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) 6 – 8 % | b) 3 – 4 % | c) 4.5 – 5.5 % | d) 5.5 – 6.0 % |

1. The electrolyte present in blood plasma are :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Na+, Cl – | b) Ca2+ , | c) Mg2+ , | d) All the above |

1. Blood of AB group cannot give blood to B group patient because :

|  |  |  |  |
| --- | --- | --- | --- |
| a) patient has antibodies b | b) patient lack antibody b | c) patient lack antibody a | d) patient has antibodies a |

1. O blood group is universal donor because the blood has:

|  |  |  |  |
| --- | --- | --- | --- |
| a) Antigen A | b) Antigen B | c) both antigens A & B | d) No antigens |

1. Number of leucocytes present in one mm3 of blood is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) 2,000 – 3,000 | b) 6,000 – 8,0000 | c) 8,000 – 10,000 | d) 1,00,000 – 15,00,000 |

1. Diapedesis is :

|  |  |
| --- | --- |
| a) Bursting of RBC | b) Bursting of WBC |
| c) Production of WBC | d) Passage of WBC out of blood capillary |

1. Vitamin K helps in :

|  |  |
| --- | --- |
| a) formation of thrombin | b) Formation of thromboplastin |
| c) Conversion of fibrinogen to fibrin | d) Conversion of prothrombin to fibrin |

1. Mitochondria are absent in :

|  |  |  |  |
| --- | --- | --- | --- |
| a) WBC | b) cartilage | c) RBC | d) Plasma cells |

1. Person with blood B can donate blood to :

|  |  |
| --- | --- |
| a) B and receive blood from group AB | b) O and receive blood from group B |
| c) B & AB and receive blood from group AB | d) B & AB and receive blood from group B |

1. Kidney shaped nucleus occur in :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Neutrophils | b) Basophil | c) Monocyte | d) Lymphocytes |

1. Erythroblastosis foetalis develops when a factor from mother passes into foetus through placenta.

|  |  |  |  |
| --- | --- | --- | --- |
| a) Rh antigens | b) Agglutinins | c) Rh antibody | d) ABO antibodies |

1. Which leucocyte secretes both heparin and histamine:

|  |  |  |  |
| --- | --- | --- | --- |
| a) Acidophils | b) Monocyte | c) Basophil | d) neutrophil |

1. Osmotic pressure is maintained by:

|  |  |  |  |
| --- | --- | --- | --- |
| a) Globulin | b) Albumin | c) Fibrinogens | d) Thrombin |

1. Important function of lymph is :

|  |  |
| --- | --- |
| a) transport of oxygen to brain | b) Transport of CO2 to lungs |
| c) Return RBC to lymph nodes | d) return interstitial fluid to blood |

1. Haemoglobin content of a healthy human is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) 10 g/100 mL | b) 11 g/100 mL | c) 12 g/100 mL | d) 12-16 g/100 mL |

1. Find the correct descending order of percentage proportional of leucocytes in human blood:

a) Neutrophils Basophils Lymphocytes Acidophils Monocytes

b) Neutrophils Monocytes Lymphocytes Acidophils Basophils

c) Neutrophils Lymphocytes Monocytes Acidophils Basophils

d) Neutrophils Acidophils Basophils Lymphocytes Monocytes

1. Blood cell that engulf bacteria by phagocytosis are:

|  |  |  |  |
| --- | --- | --- | --- |
| a) eosinophils & basophils | b) Neutrophils & monocytes | c) basophils & lymphocytes | d) Neutrophils & Lymphocytes |

1. Hemolytic diseases of new born due to Rh incompatibility is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Erythroblastosis foetalis | b) Hydrops foetalis | c) bilirubin encephalopathy | d) None of above |

1. Which blood cell releases chemical to inhibit blood clotting:

|  |  |  |  |
| --- | --- | --- | --- |
| a) Monocyte | b) Eosinophils | c) Basophils | d) Neutrophils |

1. What is correct about leucocytes:

|  |  |
| --- | --- |
| a) They are red coloured | b) They can cross capillaries |
| c) They are enucleated | d) Decrease in number cause leukemia |

1. Lymph consists of :

|  |  |
| --- | --- |
| a) RBCs, WBCs and plasma | b) RBCs, proteins and platelets |
| c) All blood components except RBCs and some proteins | d) WBC and serum |

1. Globulins contained in human blood plasma are primarily involved in :

|  |  |  |  |
| --- | --- | --- | --- |
| a) clotting of blood | b) Maintain osmotic balance | c) Defense mechanism of body | d) Oxygen transport of blood |

1. Serum different from blood in :

|  |  |  |  |
| --- | --- | --- | --- |
| a) lacking antibodies | b) lacking globulins | c) lacking albumin | d) lacking clotting factor |

1. Match column I and column II

|  |  |
| --- | --- |
| Column I | Column II |
| A. Eosinophils | I. Immune response |
| B. Basophils | II. Phagocytosis |
| C. Neutrophils | III. Release histaminase |
| D. Lymphocytes | IV. Release granules containing histamine |

|  |  |
| --- | --- |
| a) A – IV ; B – I ; C – II ; D – III | b) A – I ; B – II ; C – IV ; D – III |
| c) A – II ; B – I ; C – III ; D – IV | d) A – III ; B – IV ; C – II ; D – I |

1. Open circulatory system occurs in :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Annelids | b) Echinodermata | c) Arthropoda & molluscs | d) crocodiles |

1. A venous heart occur in :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Amphibia | b) Reptilia | c) Aves | d) Fishes |

1. Heart is two chambered in :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Fishes | b) Amphibia | c) arthropoda | d) reptiles |

1. Where oxygenated blood occurs in fishes:

|  |  |  |  |
| --- | --- | --- | --- |
| a) lungs | b) gills | c) skin | d) all the above |

1. Double circulation is incomplete in :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Frog | b) Wall lizard | c) snake | d) All the above |

1. As compared to veins, artery has:

|  |  |  |  |
| --- | --- | --- | --- |
| a) Thicker wall | b) larger lumen | c) more blood | d) Smooth flow |

1. Valve present between right atrium and right ventricle is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Bicuspid valve | b) Mitral valve | c) Tricuspid valve | d) Semilunar valve |

1. Human heart is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Myogenic | b) Neurogenic | c) Cardiogenic | d) digenic |

1. Dup sound is produced during closure of :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Semilunar valve | b) bicuspid valve | c) Tricuspid valve | d) Both (b) & (c) |

1. Sympathetic nervous system:

|  |  |  |  |
| --- | --- | --- | --- |
| a) decrease heart beat | b) increase heart beat | c) Control heart beat | d) No effect on heart beat |

1. Heart beat is accelerated by :

|  |  |
| --- | --- |
| a) Sympathetic nerves and acetylcholine | b) Cranial nerves and adrenaline |
| c) Cranial nerves and acetylcholine | d) Sympathetic nerves and epinephrine |

1. Pace maker of heart is situated :

|  |  |  |  |
| --- | --- | --- | --- |
| a) In the wall of right atrium | b) on interventricular septum | c) on interauricular septum | d) In the wall of left atrium |

1. cardiac output is blood :

|  |  |
| --- | --- |
| a) pumped by each ventricle /min | b) pumped by ventricle /sec |
| c) pumped by left ventricle /hr | d) received by heart per minute |

1. Oxygenated blood occur in :

|  |  |  |  |
| --- | --- | --- | --- |
| a) pulmonary arteries | b) right ventricle | c) right atrium | d) pulmonary vein |

1. Blood vessel which brings oxygenated blood to left auricle is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) precaval vein | b) postcaval vein | c) pulmonary vein | d) pulmonary artery |

1. What is true about veins:

|  |  |
| --- | --- |
| a) all veins carry deoxygenated blood | b) all veins carry oxygenated blood |
| c) they carry blood from organs to heart | d) they carry blood from heart towards the organs |

1. value of cardiac output is :

|  |  |
| --- | --- |
| a) auricular volume X Ventricle volume | b) Stroke volume X rate of heart beat |
| c) Blood pumped out in 1 minute | d) both (b) & (c) |

1. The value of diastolic blood pressure is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) 120 mm Hg | b) 80 mm Hg | c) 120/80 mm Hg | d) 40 mm Hg |

1. Normal pulse pressure is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) 80 mm Hg | b) 120 mm Hg | c) 40 mm Hg | d) 160 mm Hg |

1. Hardening of arteries due to deposition of cholesterol and calcium is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Atherosclerosis | b) Thrombosis | c) stenosis | d) Rhinitis |

1. Which of the following pairs, the two terms represent same thing:

|  |  |  |  |
| --- | --- | --- | --- |
| a) lymphocyte-leucocytes | b) plasma – serum | c) Mitral – Bicuspid valve | d) AV node-pacemaker |

1. Increase in blood pressure is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Hypotension | b) hypertension | c) Arteriosclerosis | d) Atherosclerosis |

1. In ECG, what does T wave represent:

|  |  |  |  |
| --- | --- | --- | --- |
| a) Diastole of auricles | b) Diastole of ventricles | c) Systole of ventricles | d) systole of auricles |

1. How many double circulations are completed by human heart per minute:

|  |  |  |  |
| --- | --- | --- | --- |
| a) 8 | b) 16 | c) 36 | d) 72 |

1. Which one indicate hypertension:

|  |  |  |  |
| --- | --- | --- | --- |
| a) 140/100 mm Hg | b) 120/85 mm Hg | c) 10/70 mm Hg | d) 90/80 mm Hg |

1. Bundle of His :

|  |  |
| --- | --- |
| a) nervous tissue suppling ventricles | b) nervous tissue suppling heart |
| c) muscular tissue suppling heart | d) muscular tissue suppling ventricles |

1. Blood passes from left ventricle to right atrium. It is called:

|  |  |  |  |
| --- | --- | --- | --- |
| a) pulmonary circulation | b) systematic circulation | c) coronary circulation | d) arteriovenous circulation |

1. Systolic pressure is 120 mm Hg. Diastolic blood pressure is 80 mm Hg. Pulse pressure is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) 120 x 80 = 9600 mm Hg | b) 120 + 80 = 200 mm Hg | c) 120 – 80 = 40 mm Hg | d) 120 / 80 = 1.5 mm Hg |

1. Angina pectoris is a major symptoms of :

|  |  |  |  |
| --- | --- | --- | --- |
| a) myocardial infarction | b) cyanosis | c) High blood pressure | d) low blood pressure |

1. To obtained a standard ECG, a patient is connected to machine by three electrodes

|  |  |
| --- | --- |
| a) One to each ankle and to the left wrist | b) One to each wrist and to the left chest region |
| c) One to each wrist and to the left ankle | d) One to each ankle and to the left chest region |

1. Volume of blood that enter aorta with each ventricle systole is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Vital capacity | b) Cardiac cycle | c) stoke volume | d) cardiac output |

1. Nodal tissue located in the lower left corner of right atrium is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) SA node | b) AV node | c) AV bundle | d) Purkinje fibre |

1. What is total diastolic time for ventricles in cardiac cycle :

|  |  |  |  |
| --- | --- | --- | --- |
| a) 0.3 sec | b) 0.5 sec | c) 0.4 sec | d) 0.1 sec |

1. Pacemaker of heart is

|  |  |
| --- | --- |
| a) Instrument for measuring heart beat | b) Instrument for measuring pulse rate |
| c) AV node that provides impulses for heart beat | d) SA node that provides impulses for heart beat |

1. Which enzyme is responsible for conversion of inactive fibrinogens to fibrins?

|  |  |  |  |
| --- | --- | --- | --- |
| a) Thrombin | b) Renin | c) Epinephrine | d) Thrombokinase |

1. Name the blood cells, whose reduction in number can cause clotting disorders, leading to excessive loss of blood from the body:

|  |  |  |  |
| --- | --- | --- | --- |
| a) Erythrocytes | b) Leucocytes | c) Neutrophils | d) Thrombocytes |

1. Person with blood group AB is considered as universal recipient because he has:

|  |  |
| --- | --- |
| a) Both A and B antigen on RBC but no antibodies in plasma | b) Both A and B antibodies in plasma |
| c) No antigen on RBC and no antibody in plasma | d) Both A and B antigen in plasma but no antibodies |

1. A certain road accident patient with unknown blood group needs immediate blood transfusion. His one doctor friend at once offers his blood. What was the blood group of the donor?

|  |  |  |  |
| --- | --- | --- | --- |
| a) B | b) AB | c) O | d) A |

1. Which of the following is agranulocytes:

|  |  |  |  |
| --- | --- | --- | --- |
| a) Lymphocytes | b) Eosinophil | c) Basophil | d) Neutrophil |

1. Antigens are present:

|  |  |  |  |
| --- | --- | --- | --- |
| a) inside the nucleus | b) on cell surface | c) inside cytoplasm | d) on nuclear membrane |

1. Child death may be occur in marriage of :

|  |  |  |  |
| --- | --- | --- | --- |
| a) Rh + man & Rh + woman | b) Rh + man & Rh – woman | c) Rh – man & Rh – woman | d) Rh – man & Rh + woman |

1. Match column I and column II

|  |  |
| --- | --- |
| Column I | Column II |
| A. P wave | I. Depolarisation of ventricles |
| B. QRS complex | II. Repolarisation of ventricles |
| C. T wave | III. Coronary ischemia |
| D. Reducing in size of T wave | IV. Depolarisation of atria  V. Repolarisation of atria |

|  |  |
| --- | --- |
| a) A – IV ; B – I ; C – II ; D – V | b) A – II ; B – I ; C – V ; D – III |
| c) A – II ; B – III ; C – V ; D – IV | d) A – IV ; B – I ; C – II ; D – III |

1. The QRS complex in a standard ECG represents:

|  |  |
| --- | --- |
| a) Depolarisation of auricles | b) Depolarisation of ventricles |
| c) Repolarisation of ventricles | d) Repolarisation of auricles |

1. Match column I and column II

|  |  |
| --- | --- |
| Column I | Column II |
| A. Tricuspid valve | I. Between left atrium & left ventricle |
| B. Bicuspid valve | II. Between right ventricle and pulmonary artery |
| C. Semilunar valve | III. Between right atrium & right ventricle |

|  |  |
| --- | --- |
| a) A – I ; B – II ; C – III | b) A – I ; B – III ; C – II |
| c) A – III ; B – I ; C – II | d) A – II ; B – I ; C – III |

1. The correct route through which pulse making impulse travels in the heart is

a) AV node Bundle of His SA node Purkinje fibre Heart muscle

b) AV node SA node purkinje fibre Bundle of his Heart muscle

c) SA node purkinje fibre Bundle of his AV node Heart muscle

d) SA node AV node Bundle of His Purkinje fibre Heart muscle

1. Pacemaker of heart is :

|  |  |  |  |
| --- | --- | --- | --- |
| a) AV node | b) bundle of his | c) SA node | d) Purkinje fibre |

1. Blood pressure in pulmonary artery is

|  |  |
| --- | --- |
| a) more than that in the carotid | b) more than that in the pulmonary vein |
| c) less than that in the vena cava | d) same as that in aorta |

1. Arteries are best defined as :

|  |  |
| --- | --- |
| a) carry blood away from the heart to different organs | b) break up into capillaries which reunites to form vein |
| c) carry blood from visceral organ to another visceral organ | d) supply oxygenated blood to different organs |

1. The thickening of wall of arteries is called

|  |  |  |  |
| --- | --- | --- | --- |
| a) Arthritis | b) Atherosclerosis | c) aneurysm | d) Both (b) & (c) |

1. An adult human with average health has systolic and diastolic pressure as

|  |  |  |  |
| --- | --- | --- | --- |
| a) 80/80 mm Hg | b) 70/120 mm Hg | c) 120/80 mm Hg | d) 50/80 mm Hg |

1. Wall of blood capillaries is formed of

|  |  |  |  |
| --- | --- | --- | --- |
| a) haemocytes | b) parietal cells | c) endothelium cells | d) oxyntic cell |

1. Which of following is not main function of lymph?

|  |  |  |  |
| --- | --- | --- | --- |
| a) Forming WBC | b) Forming antibodies | c) Forming RBC | d) Destroying bacteria |

1. Which of the following conditions causes Erythroblastosis foetalis?

|  |  |
| --- | --- |
| a) Mother Rh + ve and foetus Rh – ve | b) Mother Rh – ve and foetus Rh + ve |
| c) Both mother and foetus are Rh – ve | d) Both mother and foetus are Rh + ve |

1. Continues bleeding from an injured part of body is due to deficiency of:

|  |  |  |  |
| --- | --- | --- | --- |
| a) Vitamin – A | b) Vitamin – B | c) Vitamin – K | d) Vitamin – E |

1. The blood cancer is known as :

|  |  |  |  |
| --- | --- | --- | --- |
| a) leukemia | b) thrombosis | c) hemolysis | d) Haemophilia |

1. In ABO system of blood group if both antigen are present but no antibody , blood group will be :

|  |  |  |  |
| --- | --- | --- | --- |
| a) B | b) O | c) AB | d) A |

**[Class =11th]**

**Answers**

|  |
| --- |
| 1. a |
| 1. d |
| 1. d |
| 1. d |
| 1. b |
| 1. d |
| 1. a |
| 1. c |
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| 1. b |
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| 1. d |
| 1. d |
| 1. c |
| 1. d |
| 1. a |
| 1. b |
| 1. d |
| 1. a |

**Topic: Body Fluids & Circulation**

|  |
| --- |
| 1. c |
| 1. a |
| 1. a |
| 1. b |
| 1. d |
| 1. a |
| 1. a |
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| 1. b |
| 1. c |
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