



DIRECTORATE OF SCHOOL EDUCATION TAMILNADU

12NPCB11 (2023-24)	NEET PRACTICE QUESTIONS (TEST-11)	Class : XII Time : 1.15 hrs Total Marks : 240
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Answer key

12th - ZOOLOGY

46. D). The SA or the Sino-atrial node is the pacemaker of the heart. It helps in the generation of electrical impulses in the heart that cause the contraction of the upper chambers present in the heart.

47. B).

48. D). Due to contraction of the ventricles (ventricular systole), the pressure inside the ventricles rises that forces to open the semilunar valves of aorta and pulmonary artery so that the blood enters into these vessels. Oxygenated blood is pumped into the aorta from the left ventricle while deoxygenated blood is pumped into the pulmonary artery from the right ventricle.

49. B). $a \rightarrow c \rightarrow b \rightarrow d$

50. A) At QRS complex

51. D). If both assertion and reason are false.

52. A). R - Obtained blood from Left Auricle

53. C). IgG is the most abundant class of Ig in the body constituting approximately 8% of the total Igs. It is found in the blood, lymph and intestine.

IgA is the second most abundant class, constituting about 10 to 15 per cent of antibodies of serum. It is mainly found in sweat, tears, saliva, mucus, colostrum (first milk secreted by a mother) and gastrointestinal secretions.

54. D). T-cells are produced in the bone marrow. These cells migrate to the thymus. The thymus gland is responsible for the differentiation and maturity of the T-cells. If any damage is caused to the thymus during childhood may cause lack or a less number of mature T-cells. This will

cause the child to become more prone to infections. Thus, there will be lack or loss of cell-mediated immunity provided by the T-cells.

55.D). Culex spreads filariasis and not malaria. Xenopsylla present in rodents can spread the plague.

Pediculus or louse can carry the causative agent of typhoid. Stegomyia mosquito can carry yellow fever virus

56. A). Cytotoxic cells help to destroy the pathogens. These cells are also known as CD8+ T cells since they express the CD8 glycoprotein at their surfaces. These cells interact with the antigen presented by MHC complexes and releases cytokines to destroy it. During the transplant, it reacts to the transplanted organs by releasing cytokines which lead to rejection.

57.C). Spleen is a primary lymphoid organ. The spleen is located in the abdominal cavity, it serves as a reservoir of red blood cells, and a central artery goes through the white pulp.

58. C). Opium is dried latex of unripen capsular fruits of *Papaver somniferum* (commonly known as poppy plant). Opiates have analgesic, narcotic and sedative effects. They are depressants of CNS. They are considered as king of narcotics.

59. B). when the parasite after its rapid multiplication inside RBCs ruptures them, releasing the stage to enter fresh RBCs.

60. C). (ii) and (iii)



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11NPCB11 (2023-24)	NEET PRACTICE QUESTIONS (TEST-11)	Class : XI Time : 1.15 hrs Total Marks : 240
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Answer key

11th - ZOOLOGY

46. D). The SA or the Sino-atrial node is the pacemaker of the heart. It helps in the generation of electrical impulses in the heart that cause the contraction of the upper chambers present in the heart.

47. B).

48. A). The blood enters heart during diastole and is pumped by heart during systole

49.C). The frequency of the cardiac cycle is described by the heart rate, which is typically expressed as beats per minute. The duration of cardiac cycle is 0.8 seconds.

Plasma is the pale-yellow liquid component of blood that normally holds the blood cells in whole blood in suspension. It makes up about 55% of the body's total blood volume.

120/80 mmHg is the normal value of blood pressure. A blood pressure reading has a top number (systolic) and bottom number (diastolic).

A healthy individual has 12 - 16 gms of haemoglobin in every 100 ml of blood.

Heart beat is a complete cardiac cycle, Heart beats 72 times per minute.

50. B). In case, when SA node or the pacemaker is non-functional then there will be no origin of heart beat and there will be no transmission of impulses to atria. The ventricle fails to receive atrial impulse due to an obstruction in AV conduction. Thus, overall conducting of heart system is disrupted.

51. B). The adrenal glands make and release corticosteroid hormones and epinephrine that maintain blood pressure and regulate metabolism.

52. D). If both assertion and reason are false.

53. B). Bundle of His is a group of muscle fibres present between the two ventricles that are capable of conducting the electrical impulse from the atrioventricular node to the Purkinje fibres.

54. D). Due to contraction of the ventricles (ventricular systole), the pressure inside the ventricles rises that forces to open the semilunar valves of aorta and pulmonary artery so that the blood enters into these vessels. Oxygenated blood is pumped into the aorta from the left ventricle while deoxygenated blood is pumped into the pulmonary artery from the right ventricle.

55. A). Enlarged Q waves may indicate Myocardial infarction. Enlarged R wave generally indicates enlarged ventricles.

56. B). In atherosclerosis, the fat is deposited in the tunica media layer of the blood vessel. This leads to narrowing of the lumen of the blood vessel. Hence, the blood flow in atherosclerotic vessel is reduced. Overtime the fat deposits get hardened forming hard sclerotic plaques.

57.B). a → c → b → d

58. A). R - Obtained blood from Left Auricle

59. A) At QRS complex

60. C). Right ventricle (Deoxygenated blood) → Lungs (Oxygenated blood) → Left auricle

The deoxygenated blood pumped into the pulmonary artery is passed on to the lungs from where the oxygenated blood is carried by pulmonary veins into the left atrium. This pathway constitutes the pulmonary circulation.