Yakeen NEET 2.0 2026

Zoology By Samapti Sinha Ma'am

DPP: 4

Body Fluids and Circulation

Q1 A **correct** systemic circulation pathway is;
(A) Right atrium → Left ventricle → Aorta → Tissues → Veins
(B) Right ventricle → Pulmonary trunk → Tissues → Pulmonary veins → Left atrium
(C) Left atrium → Left ventricle → Aorta → Arteries → Tissues → Veins → Right atrium
(D) Left atrium → Left ventricle → Pulmonary trunk → Tissues → Right atrium

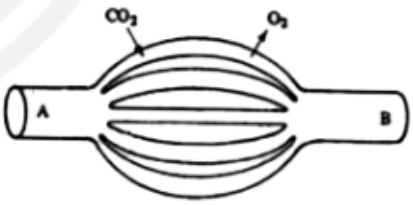
Q2 Which one of the following represents pulmonary circulation?
(A) Left atrium → Lungs → Right atrium
(B) Right atrium → Lungs → Right atrium
(C) Left atrium → Lungs → Left atrium
(D) Right atrium → Lungs → Left atrium

Q3 Systemic heart refers to;
(A) the heart that contracts under stimulation from nervous system.
(B) left auricle and left ventricle in higher vertebrates.
(C) entire heart in lower vertebrates.
(D) the two ventricles together in humans.

Q4 Which of the following statements accurately describes the purpose of the pulmonary veins in the circulatory system?
(A) They carry deoxygenated blood from the lungs to the right atrium.
(B) They carry oxygenated blood from the right ventricle to the lungs.
(C) They carry deoxygenated blood from the left ventricle to the pulmonary artery .
(D) They carry oxygenated blood from the lungs to the left atrium.

Q5 Which of the following statements accurately describes the pulmonary circulation?
(A) It carries oxygenated blood from the lungs to the right atrium.
(B) It carries deoxygenated blood from the right ventricle to the lungs.
(C) It carries oxygenated blood from the left ventricle to the aorta.
(D) It carries deoxygenated blood from the aorta to the left atrium.

Q6 Go through the following diagram of two mammalian blood vessels (A and B) connected by a capillary bed. Blood pressure is higher in B than in A. The arrows indicate the direction of net diffusion for $\mathrm{O_2}$ and $\mathrm{CO_2}$.



	Capillary bed is part of	Vein	Blood flow from
(a)	Systemic circuit	A	B to A
(b)	Pulmonary circuit	B	A to B
(c)	Either Systemic circuit or Pulmonary circuit	A	B to A
(d)	Either Systemic circuit or Pulmonary circuit	B	A to B

(A) (a) (B) (b)
(C) (c) (D) (d)

Q7 In ventricular systole, oxygenated blood is pumped into;

(A) pulmonary artery and deoxygenated blood into aorta.
(B) aorta and deoxygenated blood into pulmonary vein.
(C) pulmonary vein and deoxygenated blood into pulmonary artery.
(D) aorta and deoxygenated blood into pulmonary artery.

Q8 Read the following statements.
Statement-I: The blood pumped by the right ventricle enters the pulmonary artery.
Statement-II: Sympathetic nervous system slows heartbeat.
Mark the correct choice as:
(A) Both Statement-I and Statement-II are correct.
(B) Both Statement-I and Statement-II are incorrect.
(C) Statement-I is correct & Statement-II is incorrect.
(D) Statement-I is incorrect & Statement-II is correct.

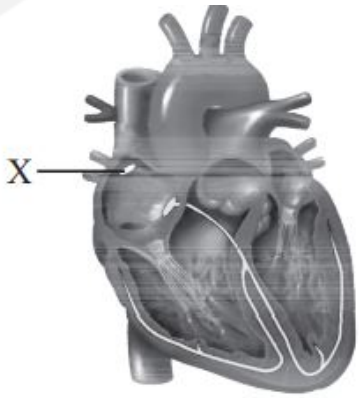
Q9 Read the following statements.
I. Systemic aorta originates from left ventricle and distributes deoxygenated blood to lungs.
II. Pulmonary arch originates from right ventricle and carries oxygenated blood to various body parts except lungs.
III. A special coronary system of blood vessels helps in the circulation of blood to and from the cardiac musculature.
Which of the following statement(s) **correctly** identifies the function of blood vessels associated with human heart?
(A) Only III
(B) I and II
(C) I, II and III
(D) I and III

Q10 Match **List-I** with **List-II** to find out the **correct** option.

	List-I		**List-II**
I.	Semilunar valve	A.	Allow blood to be pumped from the right atrium into right ventricle
II.	Bicuspid valve	B.	Guards right ventricle and pulmonary artery
III.	Tricuspid valve	C.	Lies between left ventricle and left atrium
IV.	Chordae tendineae	D.	Regulate the closure of the AV valve

(A) I- (A), II- (B), III- (C), IV- (D)
(B) I- (B), II- (A), III- (D), IV- (C)
(C) I- (D), II- (B), III- (A), IV- (C)
(D) I- (B), II- (C), III- (A), IV- (D)

Q11 A person visited a cardiologist and administered the problem in " X " because of which the blood flow from atria to ventricles is not as effective as before. What do you think is the main problem behind this?



(A) The tricuspid and mitral valves are not working properly.

(B) The malfunctioning of chordae tendinae will lead to this condition.
(C) There is a malfunction in the sino-atrial node due to which the blood flow into the ventricle will be affected.
(D) There is a problem in the blood pressure due to which efficient blood flow does not take place.

Q12 Explain the reason. There is a delay in processing the electrical signal from the AV node to the AV bundle. To;
(A) allow the atria to complete their contraction prior to ventricular contraction.
(B) ensure the right and left atria contract at the same time.
(C) ensure the right and left ventricles contract at the same time.
(D) prevent an ectopic pacemaker.

Q13 In a person, SA node was not working properly. So, it was replaced by artificial pacemaker but after a long time it becomes non-functional. What will happen then, to that patient?
(A) Cardiac muscles undergoes uncoordinated rhythmic movements.
(B) Both auricles and ventricles contract rhythmically.
(C) Ventricles contract in rhythmic manner.
(D) Auricles contract in rhythmic manner.

Q14 Read the following statements.
Assertion (A): Sino-atrial node is known as the pacemaker of the heart.
Reason (R): SAN is responsible for initiating and maintaining the rhythmic contractile activity of the heart.
Mark the correct choice as:
(A) Both Assertion (A) and Reason (R) are true and the Reason (R) is a correct explanation of the Assertion (A).
(B) Both Assertion (A) and Reason (R) are true but Reason (R) is not a correct explanation of the Assertion (A).
(C) Assertion (A) is true but the Reason (R) is false.
(D) Assertion (A) is false but the Reason (R) is true.

Q15 The correct route through which cardiac action potentials travels in the heart is;
(A) AV node $\rightarrow$ Bundle of His $\rightarrow$ SA node $\rightarrow$ Purkinje fibres $\rightarrow$ Heart muscles
(B) AV node $\rightarrow$ SA node $\rightarrow$ Purkinje fibres $\rightarrow$ Bundle of His $\rightarrow$ Heart muscles
(C) SA node $\rightarrow$ Purkinje fibres $\rightarrow$ Bundle of His $\rightarrow$ AV node $\rightarrow$ Heart muscles
(D) SA node $\rightarrow$ AV node $\rightarrow$ Bundle of His $\rightarrow$ Purkinje fibres $\rightarrow$ Heart muscles

Answer Key

Q1	(C)
Q2	(D)
Q3	(B)
Q4	(D)
Q5	(B)
Q6	(A)
Q7	(D)
Q8	(C)
Q9	(A)
Q10	(D)
Q11	(C)
Q12	(A)
Q13	(A)
Q14	(A)
Q15	(D)