



BIOLOGY

NEET & AIIMS

MOCK TEST 09 ZOOLOGY



1. Which of the following statements is incorrect regarding circulatory system of fishes?

A. Fishes have two chambered heart with an atrium and a ventricle B. Only deoxygenated blood is pumped through their heart C. Mixing of oxygenated and deoxygenated blood occurs in ventricle D. Oxygenation of blood occurs at gills

Answer: C

2. Which of the following is not a part of circulatory system of human?

A. Heart

- B. Blood vessels
- C. Sinuses
- D. Blood

Answer: C

3. Which of the following is a correct match regarding valves and their respective location? A. Tricuspid valve (Valves) - Aorta (Location) B. Mitral valve (Valves) - Between left atrium and left ventricle (Location) C. Bicuspid valve (Valve) - Between right atrium and right ventricle (Location) D. Semiluanr valve (Valves) - Between left and right atrium (Location)

Answer: B



4. Which of the following structures prevents atrioventricular values from reverting into atria during ventricular contraction?

- A. Chordae tendine
- B. Purkinje fibers
- C. Bundle of His
- D. Columnae carnae

Answer: A



5. Find the odd one among the following blood vessels w.r.t. the blood (deoxygenated or oxygenated) which is carried by them?

A. Pulmonary artery

B. Pulmonary vein

C. Coronary veins

D. Vena cava

Answer: B



6. Consider the following statements?
(a) Before birth, foramen ovale allows the blood to pass from right atrium to left atrium, thus bypassing the pulmonary circulation,
(b) Heart is protected by a double walled pericardium,

(c) The muscle fibres present in heart are different from smooth muscles in being mesodermal in origin ,

(d) Nodal tissues like AVN, SAN are specialised

neural tissues which are distributed in heart.

How many among the statements mentioned

above are correct?

A. Two

B. Three

C. One

D. Four

Answer: A

7. Which of the following structure in the normal human heat generates action potential to initiate a cardiac cycle ?

A. SA node

B. AV node

C. Purkinje fibres

D. Bundle of His

Answer: A

8. During which of the following of the following events of cardiac cycle, AV valves remain closed?

A. Atrial systole

B. Ventricular systole

C. Ventricular diastole

D. Joint diastole

Answer: B

9. Match the columns :

(a) Atrial systole (Column I)(i) 0.7 seconds (Column II) ,

(b) Joint diastole (Column I)...... (ii) 0.3 seconds (Columnn II)

(c) Ventricular systole (Column I)...... (iii) 0.1 second (Column II) ,

(d) Atrial diastole (Column I)...... (iv) 0.4 seconds (Column II)

A. a(iii) , b(iv), c(ii), d(i)

B. a(iv), b(iii), c(ii), d(i)

C. a(iii), b(iv), c(i), d(ii)

D. a(i), b(ii), c (iii), d(iv)

Answer: A



10. Select the correct statement :

A. Blood flow to the ventricles increases by

70% during atrial systole

B. Decline in ventricular pressure leads to opening of semilunar valves C. Amount of blood pumped by ventricles during a cardiac cyclre is known as cardiac output D. Our body has ability to alter stroke volume as well as cardiac output

Answer: D

11. Rise in ventricular pressure during ventricular systole leads to closure of atrioventricular valves which generates

A. Lub sound

B. Dub sound

C. Third heart sound

D. Heart murmurs

Answer: A

12. Which of the following is correct represntation of flow of action potential through conduction system of heart?

A. AV node rarr SA node rarr Bundle of His

rarr Purkinje fibres

B. SA node rarr AV node rarr Purkinje fibres

rarr Bundle of His

C. AV node rarr Bundle of His rarr SA node

rarr Purkinje fibres

D. SA node rarr AV node rarr Bundle of His

rarr Purkinje fibres

Answer: D

Watch Video Solution

13. Statement A : ECG represents electrical activity of heart during a cardiac cycle.
Statement B : Electrocardiograph is obtained using electrocardiogram machine.

A. Both statements are correct

B. Statements A is correct and B is incorrect

C. Statements A is incorrect and B is

correct

D. Both statements are incorrect

Answer: B

14. Which of the following changes in ECG indicates that a person is having a heart attack?

A. Enlargement of P-wave

B. Depressed S-T segment

C. Elevated S-T segment

D. Flat T -wave

Answer: C

15. Which of the following is not a component

of pulmonary circulation?

A. Pulmonary vein

B. Pulmonary artery

C. Aorta

D. Heart

Answer: C

16. The hepatic portal vein carries blood from A to B before it is delivered to systemic circulation. Choose the option which gives the correct description for A and B ?

A. Liver (A) Intestine (B)

B. Intstine (A) Liver (B)

C. Liver (A) Heart (B)

D. Intestine (A) Heart (B)

Answer: B

17. Which of the following structures ultimately drains, deoxygenated blood fro heart musculature through coronary vein into right atrium?

A. Superior vena cava

B. Inferior vena cava

C. Coronary sinus

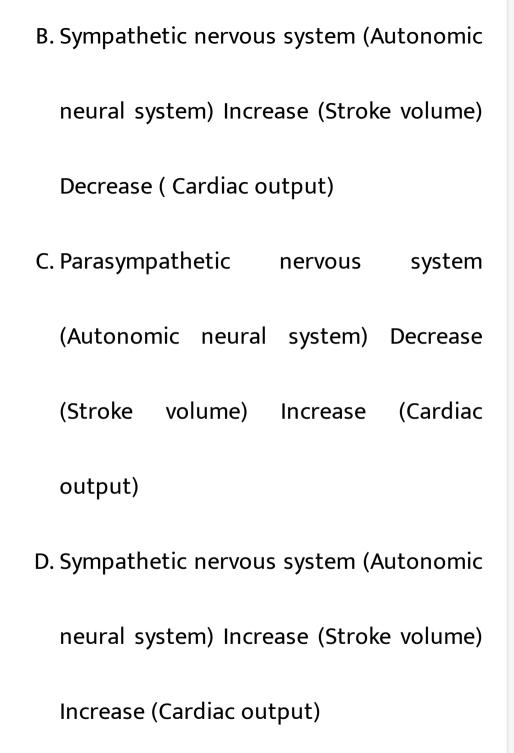
D. Coronary arteries

Answer: C



18. Select the correct match regarding the effect of autonomic nervous system on stroke volume and cardiac output.

A. Parasymp	oathetic	nervous	system
(Autonor	nic neura	l system)	Increase
(Stroke	volume)	Decrease	(Cardiac
output)			



Answer: D



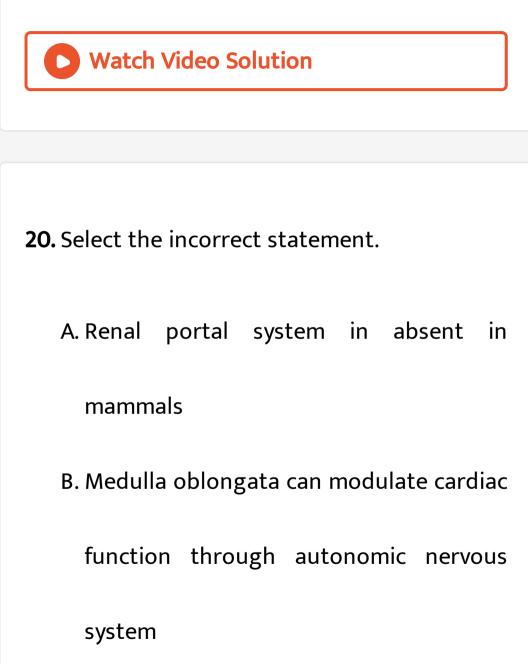
19. Which of the following hormones will lead to increase in number of QRS complexes in an ECG in a minute?

A. Adrenaline

- B. Acetylcholine
- C. Nor adrenaline

D. Both (1) & (3)





C. Hepatic vein carries blood from intestine

to liver

D. In human, heart beat is initiated by

specialised nodal tissue, hence the heart

is called myogenic

Answer: C

21. Sympathetic nerve endings release non-adrenaline which leads to

A. Increase in rate of heart beat

B. Decrease in speed of conduction of

action potential through heart

musculature

C. Decrease in cardiac output and stroke

volume

D. Increase in stroke volume but decrease

in cardiac output

Answer: A