

ZOOLOGY TEST

Body Fluids and Circulation

Time: 1hour

Marks: 200Marks

1. One of the factor required for the maturation of erythrocytes is
 - a. Vitamin D
 - b. Vitamin A
 - c. Vitamin B12
 - d. Vitamin C
2. **The normal diastolic blood pressure in a normal healthy adult human is**
 - a. 80 mm Hg
 - b. 60 mm Hg
 - c. 90 mm Hg
 - d. 110 mm Hg
3. _____ **is a blood disorder where the haemoglobin is defective**
 - a. Heterochromia
 - b. Alopecia
 - c. Haemolysis
 - d. Sickle cell anaemia
4. **Which of the following two-word items mean the same thing?**
 - a. Blood cancer – Haemophilia
 - b. Pacemaker – S A Node
 - c. Osteoporosis – arthritis
 - d. None of the above
5. **In humans, _____ is the difference between systolic and diastolic pressure.**
 - a. 40 mm Hg
 - b. 20 mm Hg
 - c. 0 mm Hg
 - d. 40 mmHg
6. _____ **is a condition where plaque builds up on the inside of arteries.**
 - a. Arthrocentesis
 - b. Arthralgia
 - c. Arthritis
 - d. Atherosclerosis
7. _____ **carries deoxygenated blood to the lungs from the right ventricle.**
 - a. Pulmonary artery
 - b. Pulmonary vein
 - c. Aorta
 - d. Superior vena cava
8. _____ **forms clots when blood vessels get damaged.**

- a. Platelets
- b. Cellulose
- c. Haemoglobin
- d. Fibrinogen

9. _____ is a small branch of an artery that leads into a capillary.

- a. Capillaries
- b. Areolas
- c. Arteriole
- d. None of the above

10. Which of the following is the fluid component of blood?

- a. Plasma
- b. Serum
- c. Lymph
- d. Cerebrospinal fluid

11. Which of the following is not a function of blood?

- a. Transport of nutrients and gases
- b. Maintenance of body temperature
- c. Protection against infection
- d. Production of enzymes and hormones

12. Which of the following is not a component of the cardiovascular system?

- a. Heart
- b. Blood vessels
- c. Lungs
- d. Blood

13. Which of the following is the smallest blood vessel in the body?

- a. Vein
- b. Artery
- c. Capillary
- d. Aorta

14. Which of the following is not a type of blood vessel?

- a. Vein
- b. Artery
- c. Capillary
- d. Lymphatic vessel

15. Which of the following is the correct sequence of blood flow through the heart?

- a. Right atrium, right ventricle, pulmonary artery, lungs, pulmonary vein, left atrium, left ventricle, aorta
- b. Right atrium, left atrium, right ventricle, left ventricle, pulmonary artery, lungs, pulmonary vein, aorta

- c. Left atrium, left ventricle, pulmonary vein, lungs, pulmonary artery, right atrium, right ventricle, aorta
- d. Left atrium, right atrium, left ventricle, right ventricle, pulmonary vein, lungs, pulmonary artery, aorta

16. Which of the following is the term used to describe the force exerted by blood against the walls of blood vessels?

- a. Blood pressure
- b. Heart rate
- c. Stroke volume
- d. Cardiac output

17. Which of the following chambers of the heart pumps oxygenated blood to the systemic circulation?

- a. Right atrium
- b. Right ventricle
- c. Left atrium
- d. Left ventricle

18. What is the main component of blood plasma?

- a. Red blood cells
- b. White blood cells
- c. Water
- d. Platelets

19. Which WBCs from the list below have a role in allergic reactions?

- a. Basophils,
- b. Eosinophils,
- c. Neutrophils,
- d. Monocytes.

20. Of the following cells, which one produces platelets?

- a. Erythrocytes,
- b. Thrombocytes,
- c. Megakaryocytes,
- d. Lymphocytes.

21. What proportion of the total WBCs are lymphocytes?

- a. 10-15%
- b. 20-25%
- c. 40-50%
- d. 56%

22. Which of the following groups of cells contain the most WBCs?

- a. Neutrophils,
- b. Basophils,
- c. Eosinophils,
- d. Lymphocytes.

23. Which of the following does not basophil secrete?

- a. Histamine,
- b. Serotonin,
- c. Heparin,
- d. Heparin

24. How long on average do RBCs live?

- a. 120 (seconds),
- b. 120 (hours),
- c. 120 (days),
- d. 120 (weeks).

25. Among the following, which is not a formed element?

- a. Erythrocytes;
- b. Leucocytes
- c. Lymph
- d. Platelets

26. What is plasma devoid of clotting components called?

- a. Blood,
- b. Serum,
- c. Lymph,
- d. Fluid.

27. What kind of tissue is blood?

- a. Loose connective tissue
- b. Dense connective tissue
- c. Muroid connective tissue
- d. Specialised connective tissue

28. Where does adult erythrocyte formation take place?

- a. Red bone marrow,
- b. Liver,
- c. Spleen,
- d. Muscles.

29. An open circulatory system occurs in

- a. Man
- b. Reptiles
- c. Animals
- d. Insects

30. Which type of blood cells have 5-7 lobed nucleus?

- a. Erythrocytes
- b. Neutrophils
- c. Eosinophils
- d. Basophiles

31. Blood vessels that contain valves are called

- a. Arteries
- b. Veins
- c. Capillaries
- d. All the above

32. Bundle of His is found in

- a. Muscle
- b. Liver
- c. Brain
- d. Heart

33. Chordae tendinae are found in

- a. Ventricles of heart
- b. Ventricles of brain
- c. Atria of heart
- d. Joints

34. Neurogenic heart is the characteristics of

- a. Rats
 - b. Human
 - c. Lower vertebrates
 - d. Rabbit
35. Bicuspid valve is also called
- a. Thebasian valve
 - b. Eustachian valve
 - c. Mitral valve
 - d. Semilunar valve
36. A four chambered heart is not found in
- a. Columba
 - b. Macaca
 - c. Crocodile
 - d. Hemidactylus
37. Arteries are
- a. Thin walled and blood flows under diminished pressure
 - b. Thick walled and blood flows under high pressure
 - c. Thin walled and blood flows under diminished pressure
 - d. Thick walled and blood flows under diminished pressure
38. Mark the correct statement for human heart
- 1. All the WBCs are nucleated in blood vessels
 - 2. All the RBCs are enucleated in blood vessels
 - 3. Rh antigen is present on the surface of every RBC
 - 4. Antibodies are present in the blood plasma
- a. 1,2,3,4
 - b. 2,4
 - c. 1,2,3
 - d. 1,2
39. Which statement is false?
- a. Capillary in muscle are usually empty of blood
 - b. The mammalian heart will continue to beat when its nerve supply is cut
 - c. In vertebrates, veins can be distinguished from arteries because veins carry oxygenated blood
 - d. Water and small molecules can easily pass through the walls of most of the capillaries.
40. What percentage of plasma is proteins?
- a) 22-25%
 - b) 50-55%
 - c) 6-8%
 - d) 15-18%
41. Which of these is not a major protein of plasma?
- a) Keratin
 - b) Fibrinogen
 - c) Globulins
 - d) Albumins
42. What is serum comprised of?
- a) Blood without plasma
 - b) Plasma without clotting factors
 - c) Plasma without minerals
 - d) Plasma without proteins
43. Which of these diseases make the lumen of arteries narrower?
- a) Atherosclerosis

- b) Hypertension
 - c) Angina
 - d) Heart failure
44. What causes angina pectoris?
- a) Lack of oxygen in heart muscles
 - b) Increase in blood pressure
 - c) Deposition of phosphorus in blood vessels
 - d) Irregular heartbeat
45. How many types of circulatory pathways are present in the animal kingdom?
- a) One
 - b) Two
 - c) Three
 - d) Four
46. Which of the following walls separate the right and left atria?
- a) Thin, intra-atrial septum
 - b) Thick, intra-atrial septum
 - c) Thick, inter-atrial septum
 - d) Thin, inter-atrial septum
47. What is the hepatic portal system?
- a) The connection between the digestive tract and kidneys
 - b) The connection between the alimentary canal and heart
 - c) The connection between the alimentary canal and the brain
 - d) The connection between the alimentary canal and the liver

Directions: In the following questions, a statement of assertion is followed by a statement of reason.

Mark the correct choice as:

- (a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.
 - (b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
 - (c) If Assertion is true but Reason is false.
 - (d) If both Assertion and Reason are false.
48. Assertion: In most of the mammal RBCs are devoid of nucleus.
Reason: Red colour is filled in the entire cytoplasm of RBCs, iron containing complex protein called hemoglobin.
49. Assertion: Open circulatory system is more efficient than closed circulatory system.
Reason: In closed circulatory system rather than in open circulatory system, the blood flow is slow.
50. Assertion: In amphibians and reptiles, double circulation is incomplete.
Reason: Unlike in birds and mammals, in amphibian and reptiles, the left atrium receives oxygenated blood and right atrium receives deoxygenated blood.