

HALF YEARLY EXAMINATION - 2023

Exam.No

Time : 3.00 Hours

XI - ZOOLOGY

Marks : 70

PART - I

Note : 1) Answer all the questions. 2) Choose the best answer. (15x1=15)

1. What taxonomic aid gives comprehensive information about a taxon?
 - a) Taxonomic key
 - b) Herbarium
 - c) Flora
 - d) Monograph
2. The respiratory pigment in cockroach is
 - a) haemoglobin
 - b) haemocyanin
 - c) haemoerythrin
 - d) none of the above
3. Non-shivering thermogenesis in neonates produces heat through
 - a) white fat
 - b) brown fat
 - c) yellow fat
 - d) colourless fat
4. Buccopharyngeal respiration in frog
 - a) is increased when nostrils are closed
 - b) stops when there is pulmonary respiration
 - c) is increased when it is catching fly
 - d) stops when mouth is opened
5. **Assertion(A):** Large intestine also shows the presence of villi like small intestine
Reason (R): Absorption of water takes place in large intestine
 - a) Both A and B are true and B is the correct explanation of A
 - b) Both A and B are true but B is not the correct explanation of A
 - c) A is true but B is false
 - d) A is false but B is true
6. Which of the following best describes the process of gas exchange in the lungs?
 - a) Air moves in and out of the alveoli during breathing
 - b) Carbon dioxide diffuses from deoxygenated blood in capillaries into the alveolar air
 - c) Oxygen and carbon dioxide diffuse down their concentration gradients between blood and alveolar air
 - d) Oxygen diffuses from alveolar air into deoxygenated blood
7. Dub sound of heart is caused by
 - a) Closure of atrio-ventricular valves
 - b) Opening of semi-lunar valves
 - c) Closure of semi-lunar valves
 - d) Opening of atrio-ventricular valves
8. The hormone which helps in the reabsorption of water in kidney tubules is
 - a) Cholecystokinin
 - b) Angiotensin II
 - c) Antidiuretic hormone
 - d) Pancreozymin
9. Inflammation of joints due to accumulation of uric acid crystals is called as
 - a) Gout
 - b) Myasthenia gravis
 - c) Osteoporosis
 - d) Osteomalacia
10. All of the following are associated with the myelinated sheath except
 - a) Faster conduction of nerve impulses
 - b) Nodes of Ranvier forming gaps along the axon
 - c) Increased energy output for nerve impulse conduction
 - d) Saltatory conduction of action potential
11. Which of the following statement about sex hormones is correct?
 - a) Testosterone is produced by leydig cells under the influence of luteinizing hormone
 - b) Progesterone is secreted by corpus luteum and softens pelvic ligaments during child birth
 - c) Oestrogen is secreted by both sertoli cells and corpus luteum
 - d) Progesterone produced by corpus luteum is biologically different from the one produced by placenta
12. The instrument used to measure blood pressure is
 - a) Stethoscope
 - b) Haemocytometer
 - c) Sphygmomanometer
 - d) Haemoglobinometer

13. Which one of the following is not related to vermiculture?
 i) Maintains soil fertility ii) Breakdown of inorganic matter
 iii) Gives porosity, aeration and moisture holding capacity
 iv) Degradation of non biodegradable solid waste
 a) i and ii is correct b) iii and iv is correct
 c) ii and iv is not correct d) i and iii is not correct
14. How much oxygen is delivered in 100ml of blood in a normal physiological conduction?
 a) 6ml b) 5ml c) 7ml d) 8ml
15. Match the following and find the correct answer.
- | Column I | Column II |
|---------------------------------|--|
| i) Erythropoietin | - a) Agglutinization |
| ii) Haematocrit | - b) It takes important role in inflammation of body tissues |
| iii) Heparin | - c) Finding the ratio between blood and red blood cells |
| iv) Antigen | - d) It stimulates the synthesis of RBCs in the bone marrow |
| a) i-d ii-c iii-b iv-a | |
| b) i-a ii-b iii-c iv-d | |
| c) i-a ii-c iii-d iv-b | |
| d) i-d ii-c iii-b iv-a | |

PART - II

Note: Answer any six questions. Question No.24 is compulsory. (6x2=12)

16. What is cladogram?
 17. Compare closed and opened circulatory system.
 18. What are the components of blood in frog?
 19. What should be the characteristic features of respiratory surface?
 20. Differentiate cortical from medullary nephrons.
 21. How is tetany caused?
 22. Write the functions of (CCK) cholecystokinin.
 23. Define: Cross Breeding.
 24. Right ventricular wall is thinner than the left ventricular wall. Why?

PART - III

Note: Answer any six questions. Question No.33 is compulsory. (6x3=18)

25. List the functions of air bladder in fishes.
 26. Compare dense regular connective tissue with the dense irregular connective tissues?
 27. Bile juice contains no digestive enzymes, yet it is important for digestion. Why?
 28. What is meant by dead space?
 29. What is lymph? Write its function.
 30. Draw a labelled diagram of LS of kidney.
 31. What is meant by physiotherapy?
 32. Write the clinical significance of ultra sonogram.
 33. Give the economic importance of Silkworm.

PART - IV

Note: Answer all the questions. (5x5=25)

34. a) List the characteristics features of phylum arthropoda?
 (OR)
 b) Compare the chordates with non-chordates?
35. a) Give an account of digestive system of earthworm?
 (OR)
 b) Describe the process of inspiration & expiration with a diagram?
36. a) Describe the process of digestion in the stomach.
 (OR)
 b) Distinguish between arteries and veins.
37. a) How is Urine formed in the human body?
 (OR)
 b) List the refractive errors of eye.
38. a) What are the advantages of CT over other imaging techniques?
 (OR)
 b) i) Give the economic importance of lac insect.
 ii) What are the advantages of artificial insemination?