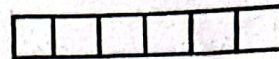


11 - Std

ACHIEVEMENT TEST - 2023 - 2024



Time : 1.30 Hrs

ZOOLOGY

Marks : 100

1. A living organism is differentiated from non living structure based on
 A) reproduction B) growth C) metabolism D) movement *All the above*
2. What taxonomic aid gives comprehensive information about taxon?
 A) taxonomic key B) herbarium C) flora D) monograph
3. Molecular taxonomic tool consists of
 A) DNA and RNA B) mitochondria and endoplasmic reticulum C) cell wall and membrane proteins D) all the above
4. Who coined the term biodiversity?
 A) Walter Rosen B) A. G Tansley C) Aristotle D) AP De Candole
5. First step in the digestion of fat is
 A) emulsification B) enzyme action C) absorption by lacteals D) storage in adipose tissue
6. The sphincter of odi guards
 A) hepatopancreatic ducts B) common bile duct C) pancreatic duct D) cystic duct
7. Choose the incorrect sentence from the following.
 A) bile juice emulsifies fat B) chyme is a digested acidic food in the stomach
 C) pancreatic juice converts lipid into fatty acid and glycerol D) enterokinase stimulates the secretion of pancreatic juice
8. Which of the following combinations is not correctly matched
- | Column 1 | Column 2 |
|--|----------|
| A) bilirubin and biliverdin - intestinal juice | |
| B) hydrolysis of starch - amylases | |
| C) digestion of fat - lipases | |
| D) salivary gland - parotid | |
9. Which of the following is not an endemic species of earthworm?
 A) perionyx B) lampito C) eudrillus D) octochaetona
10. Induced breeding technique is used in
 A) marine fishery B) capture fishery C) culture fishery D) inland fishery
11. Eri silk is obtained from
 A) lacifer lacca B) nosema bombycis C) altacus ricini D) altacus mylitta
12. Aquaponics is a technique, which is
 A) a combination of aquaculture and fish culture B) a combination of aquaculture and hydroponics
 C) a combination of vermiculture and hydroponics D) a combination of aquaculture and prawn culture
13. Match the following columns and select the correct option:-
- | Column 1 | Column 2 |
|------------------|---------------------|
| (P) pila | - (i) devil fish |
| (Q) dentalium | - (ii) chiton |
| (R) chaetopleura | - (iii) apple snail |
| (S) octopus | - (iv) tusk shell |
- A) (P) - (ii), (Q) - (i), (R) - (iii), (S) - (iv) B) (P) - (iii), (Q) - (iv), (R) - (ii), (S) - (i)
 C) (P) - (ii), (Q) - (iv), (R) - (i), (S) - (iii) D) (P) - (i), (Q) - (ii), (R) - (iii), (S) - (iv)
14. The limbless amphibian is
 A) ichtyophis B) hyla C) rana D) salamander
15. The respiratory pigment in cockroach is
 A) haemoglobin B) haemocyanin C) haemoerythrin D) none of the above
16. Which of the following have the highest number of species in nature?
 A) insects B) birds C) angiosperms D) fungi
17. The symmetry exhibited by cnidarians is
 A) radial B) bilateral C) pentamerous radial D) asymmetrical
18. Which of the following is an egg laying mammal?
 A) delphinus B) macropus C) ornithorhynchus D) equus
19. Which of the following is not involved in blood clotting?
 A) fibrin B) calcium C) platelets D) bilirubin
20. An unconscious patient is rushed into the emergency room and needs a fast blood transfusion. As there is no time to check her medical history or determine her blood type, which type of should you use as her doctor, would give her
 A) A- B) AB C) O+ D) O-
21. At any given time there is more blood in the venous system than that of the arterial system. Which of the following features of the veins allow this?
 A) relative lack of smooth muscles B) presence of valves
 C) proximity of the veins to lymphatics D) thin endothelial lining

22. Match the following human spinal nerves in Column 1 with their respective number in Column 2 and choose the correct option:-

Column 1
 (P) cervical nerves
 (Q) thoracic nerves
 (R) lumbar nerves
 (S) coccygeal nerves

Column 2
 - (i) 5 pairs
 - (ii) 1 pair
 - (iii) 12 pairs
 - (iv) 8 pairs

A) (P) - (iv), (Q) - (iii), (R) - (i), (S) - (ii)
 C) (P) - (iv), (Q) - (i), (R) - (ii), (S) - (iii)

B) (P) - (iii), (Q) - (i), (R) - (ii), (S) - (iv)
 D) (P) - (ii), (Q) - (iv), (R) - (i), (S) - (iii)

23. Which structure in the ear converts pressure waves to action potentials?

A) tympanic membrane B) organ of corti C) oval window D) semicircular canal

24. The respiratory centre is present in the

A) medulla oblongata B) hypothalamus C) cerebellum D) thalamus

25. Which of the following statement the somatic division of the peripheral neural system is incorrect?

A) its pathways innervate skeletal muscles B) its pathways are usually voluntary
 C) some of its pathways are referred to as reflex arc D) its pathways always involve four neurons

26. Non shivering thermogenesis in neonates produces heat through

A) white fat B) brown fat C) yellow fat D) colourless fat

27. The main function of cuboidal epithelium is

A) protection B) secretion C) absorption D) both b and e

28. The oxygen dissociation curve is

A) sigmoid B) straight line C) curved D) rectangular hyperbola

29. CO₂ is transported through blood to lungs as

A) carbonic acid B) carbamino haemoglobin C) oxy haemoglobin D) carboxy haemoglobin

30. Match the diseases in Column 1 with the symptoms in Column 2, and choose the correct option:-

Column 1 Column 2

(P) asthma - (i) recurring of bronchitis
 (Q) emphysema - (ii) accumulation of WBC in alveolus
 (R) pneumonia - (iii) allergy

A) (P)-(iii), (Q)-(ii), (R)-(i) B) (P)-(iii), (Q)-(i), (R)-(ii) C) (P)-(ii), (Q)-(iii), (R)-(i) D) (P)-(ii), (Q)-(i), (R)-(iii)

31. Make the correct pairs:-

Column 1 Column 2

(P) tidal volume - (i) 1000 to 1100 ml
 (Q) residual volume - (ii) 500 ml
 (R) expiratory reserve volume - (iii) 2500 to 3000 ml
 (S) inspiratory reserve volume - (iv) 1100 to 1200 ml

A) (P) - (ii), (Q) - (iv), (R) - (i), (S) - (iii)
 C) (P) - (ii), (Q) - (iv), (R) - (iii), (S) - (i)

B) (P) - (iii), (Q) - (ii), (R) - (iv), (S) - (i)
 D) (P) - (iii), (Q) - (iv), (R) - (i), (S) - (ii)

32. Intercostal muscles are found between the A) vertebral column B) sternum C) ribs D) glottis

33. Presence of gills in the tadpole of frog indicates that

A) fishes were amphibians in the past B) fishes evolved from frog like ancestors
 C) frogs will have gills in future D) frogs evolved from gilled ancestors

34. Sexually earthworms are

A) sexes are separate B) hermaphroditic but sexes are separate
 C) hermaphroditic and self fertilizing D) parthenogenic

35. The location and number of malpighian tubules in periplanata

A) at the junction of midgut and hindgut, about 150 B) at the junction of foregut and midgut, about 150
 C) surrounding gizzard, 8 D) at the junction of the colon and rectum, 8

36. Which of the following does not have an open circulatory system?

A) frog B) earthworm C) pigeon D) cockroach

37. The end product of ornithine cycle is

A) Carbon di oxide B) uric acid C) urea D) ammonia

38. Concentration of urine depends on which part of the nephron?

A) bowman's capsule B) length of Helene's loop
 C) proximal convoluted tubule. D) net work of capillaries arising from the glomerulus

39. Glomerular filtrate contains

A) blood without blood cells and proteins B) plasma without sugar
 C) blood with proteins but without cells D) blood without urea

40. Malpighian tubules remove excretory products from

A) mouth B) oesophagus C) haemolymph D) alimentary canal

41. Identify the wrong match:-

A) bowman's capsule - glomerular filtration B) distal convoluted tubule - absorption of glucose

- C) henle's loop - concentration of urine
 42. Each skeletal muscle is covered by
 A) epimysium B) perimysium
 43. Type of movement exhibited by the macrophages is
 A) flagellar B) ciliary
 44. Muscles are derived from
 A) ectoderm B) mesoderm
 45. The protein present in the thick filament is
 A) Myosin B) actin
 46. Synovial fluid is found in
 A) ventricles of the brain B) spinal cord
 47. Spermatogenesis in mammalian testis is controlled by
 A) leutinizing hormone B) follicle stimulating hormone C) fsh and prolactin D) gh and prolactin
 48. Hypersecretion of growth hormone in children leads to
 A) cretinism B) gigantism C) Graves disease D) tetany
 49. The maintenance of constant internal environment is referred to as
 A) regulation B) homeostasis C) coordination D) hormonal control
 50. Which of the following gland is related with immunity?
 A) pineal gland B) adrenal gland C) thymus D) parathyroid gland
 51. Foetal development can be observed using
 A) ultrasonogram B) x-ray C) ECG D) EEG
 52. Blood smear is used to study
 A) total RBC B) total WBC C) haemoglobin D) differential count of WBC
 53. PET scan uses
 A) radio isotopes B) UV rays C) ultrasound D) IR waves
 54. The abundant intracellular cation is
 A) H⁺ B) K⁺ C) Na⁺ D) Ca⁺⁺
 55. Which statements are correct regarding cone cells?
 (i) Cone cells are less sensitive in bright light than rod cells (ii) They are responsible for colour vision
 (iii) Erythropsin is a photo pigment which is sensitive to red colour light (iv) They are present in the fovea of retina
 A) (iii), (ii) and (i) B) (ii), (iii) and (iv) C) (i), (iii) and (iv) D) (i), (ii) and (iv)
 56. Which of the following statements is not related to myelin sheath?
 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
 57. Choose the incorrectly matched pair:-
 A) pepsin - stomach B) renin - liver C) trypsin - intestine D) ptyalin - mouth
 58. Which of the following is not the function of liver?
 A) production of insulin B) detoxification C) storage of glucogen D) production of bile
 59. Assertion [A]: Large intestine also shows the presence of villi like small intestine
 Reason [R]: Absorption of water takes place in the large intestine.
 A) both A and R are true and R is the correct explanation of A B) both A and R are true, but R is not the correct explanation of A
 C) A is true, but R is false D) A is false, but R is true
 60. Which of the following is not true regarding the intestinal villi?
 A) they possess microvilli B) they increase the surface area
 C) they are supplied with capillaries and the lacteal vessels D) they only participate in the digestion of fats
 61. Which of the following is not present in the same rank?
 A) primata B) orthoptera C) diptera D) insecta
 62. A group of organisms having similar traits of a rank is
 A) species B) taxon C) genus D) family
 63. Cladogram considers the following characters
 A) physiological and biochemical B) evolutionary and phylogenetic C) taxonomic and systematic D) none of the above
 64. Choose the correctly matched pair
 A) egglayers - brahma B) broiler types - leghorn C) dual purpose - white plymouth rock D) ornamental breed - silkie
 65. Rearing of honey bees called
 A) sericulture B) lac culture C) vermiculture D) Apiculture
 66. Prawn belongs to the class
 A) crustacea B) Annelida C) coelenterata D) echinodermata
 67. Prevention of substances from leaking across the tissue is provided by
 A) tight Junction B) adhering Junction C) gap Junction D) elastic Junction
 68. Which one of these functions can be carried out by a mature red blood cells?
 A) Protein synthesis B) cell division C) lipid synthesis D) active transport
 69. Erythro blastosis is due to the destruction of
 A) foetal RBC B) foetus suffer from atherosclerosis C) foetal WBCs D) foetus suffers from mianmata

70. What is the function of lymph?
 A) transport of O₂ into brain
 C) bring interstitial fluid into blood
 B) transport of CO₂ into lungs
 D) bring RBC and WBC into the lymph node
71. Which one of the following is not correctly matched?
 A) human - ureotelic
 B) Birds - uricotelic
 C) lizards - uricotelic
 D) whale - ammonotelic
72. Nephridia of earthworms perform the same function as
 A) gills of prawn
 B) flame cells of planaria
 C) trachea of insects
 D) nematoblasts of hydra
73. Pneumatic bones are seen in
 A) mammalia
 B) aves
 C) reptilia
 D) sponges
74. Vital capacity is
 A) TV + IRV
 B) TV + ERV
 C) RV + ERV
 D) TV + IRV + ERV
75. Which of the following substances in tobacco smoke damage the gas exchange system?
 A) carbon monoxide and carcinogens
 B) carbon monoxide and nicotine
 C) carcinogens and tar
 D) nicotine and tar
76. Which of the following are the sense organs of cockroach?
 A) antennae, compound eyes, maxillary pulps and tegmina
 B) Antennae, compound eyes, maxillary Pulp and tarsi
 C) antennae, ommatidia, maxillary Pulp, sternum and Anal style
 D) antennae, eyes, maxillary Pulp, tarsi of walking legs and ceca
 C) mesonephros
 D) metanephros
77. Kidney of frog is
 A) archinephros
 B) pronephros
 C) mesonephros
 D) metanephros
78. The type of vision in Cockroaches is -----
 A) three dimensional
 B) two dimensional
 C) mosaic
 D) cockroach do not have vision
79. Animal requiring minimum amount of water to produce urine are
 A) ureotelic
 B) ammonotelic
 C) uricotelic
 D) chemotelic
80. What will happen if the stretch receptors of the urinary bladder wall are totally removed
 A) micturition will continue
 B) urine will continue to be collected in the bladder
 C) there will be micturition
 D) urine will not be collected in the bladder
81. The functional unit of a muscle fibre is
 A) sarcomere
 B) sarcoplasm
 C) myosin
 D) actin
82. Inflammation of joints due to accumulation of uric acid crystals is called as
 A) gut
 B) myasthenia garvis
 C) osteoporosis
 D) osteomalacia
83. The structure which connects the hypothalamus with the anterior lobe of pituitary gland is the
 A) dendrites of neuro hypophysis
 B) axons of neurohypophysis
 C) bands of white fibres from cerebellar region
 D) hypophyseal portal system
84. Serum cholesterol is regulated by
 A) thyroxin
 B) FSH
 C) pancreas
 D) thyroid and parathyroid
85. RBC diluting fluid is
 A) Turk's solution
 B) Tolsson solution
 C) Hayem's solution
 D) folin phenol reagent
86. Every unit of classification regardless of its rank is
 A) Taxon
 B) Variety
 C) Species
 D) Strain
87. Sea anemone belongs to phylum
 A) Protozoa
 B) Porifera
 C) Coelenterata
 D) Echinodermata
88. The excretory cells that are found in platyhelminthes are
 A) Protonephridia
 B) Flame cells
 C) Solenocytes
 D) All of these
89. Organisms, self fertilization is seen.
 A) Fish
 B) Round worm
 C) Earthworm
 D) Liver fluke
90. Lateral line sense organs occur in
 A) Salamander
 B) Frog
 C) Water snake
 D) Fish
91. Four chambered heart is present in
 A) Lizard
 B) Snake
 C) Scorpion
 D) Crocodile
92. What type of fibres are found in connective tissue matrix?
 A) Collagen
 B) Areolar
 C) Cartilage
 D) Tubular
93. How many abdominal segments are present in male and female Cockroaches?
 A) 10, 10
 B) 9, 10
 C) 8, 10
 D) 9, 9
94. In small intestine, active absorption occurs in case of
 A) Glucose
 B) Amino acids
 C) Na⁺
 D) All the above
95. Which of the following combinations are not matched?
 A) Vitamin D - Rickets
 B) Thiamine - Beriberi
 C) Vitamin K - Sterility
 D) Niacin - Pellagra
96. Breathing is controlled by
 A) cerebrum
 B) medulla oblongata
 C) cerebellum
 D) pons
97. The respiratory structures of insects are
 A) tracheal tubes
 B) gills
 C) green glands
 D) lungs
98. The Tidal Volume of a normal person is
 A) 800 mL
 B) 1200 mL
 C) 500 mL
 D) 1100 - 1200 mL
99. When 1500 mL air is in the lungs, it is called
 A) vital capacity
 B) tidal volume
 C) residual volume
 D) inspiratory reserve volume
100. Which one of the following plasma proteins is involved in the coagulation of blood?
 A) Globulin
 B) Fibrinogen
 C) Albumin
 D) Serum amylase