

ZOOLOGY

1. Pseudopodia is a organ in protozoans
 - (A) Respiratory
 - (B) Locomotory
 - (C) Reproductive
 - (D) Excretory

2. Coral reefs are formed by
 - (A) Molluscs
 - (B) Coelenterates
 - (C) Protozoans
 - (D) Echinoderms

3. Free living Platyhelminthes forms belong to the class
 - (A) Cestoda
 - (B) Trematoda
 - (C) Turbellaria
 - (D) Nematoda

4. Malarial fever in man is caused by
 - (A) Mosquito
 - (B) Virus
 - (C) Bacterium
 - (D) *Plasmodium sp.*

5. Cup shaped excretory organs with a tuft of flagella found in flatworms are called
 - (A) Glandular cells
 - (B) Zooids
 - (C) Flame Cells
 - (D) Ocelli

6. Which of the following is a larva of nematodes?
 - (A) Caterpillar
 - (B) Pylidium
 - (C) Bipilineria
 - (D) Zoa

7. Pick the correct group which has the largest living animals
- (A) Fishes
 - (B) Birds
 - (C) Reptiles
 - (D) Mammals
8. Summer sleep of frog is known as
- (A) Aestivation
 - (B) Hibernation
 - (C) Paedogenesis
 - (D) Neoteny
9. Connecting link between reptiles and birds is
- (A) Sphenodon
 - (B) Frog
 - (C) Archaeopteryx
 - (D) Protopterus
10. Which among the following are the electroreceptors in Shark?
- (A) Placoid Scales
 - (B) Ampullae of Lorenzini
 - (C) Opidthonepheron
 - (D) None of the above
11. The presence of Pyloric Ceca is a unique feature of
- (A) Teleosts
 - (B) Shark
 - (C) Jawless Fish
 - (D) All Fishes
12. The process by which developing embryos receive nutrition from mother is named as
- (A) Lecithotrophy
 - (B) Anesotrophy
 - (C) Placentotrophy
 - (D) Autotrophy

13. Pigmentation of skin is due to
- (A) Lymphocytes
 - (B) Monocytes
 - (C) Leucocytes
 - (D) Melanocytes
14. Which one of the following cell organelles does not have a membrane system?
- (A) Mitochondrion
 - (B) Golgi apparatus
 - (C) Nucleus
 - (D) Ribosome
15. Centromere is present in the
- (A) Mitochondria
 - (B) Endoplasmic Reticulum
 - (C) Chromosome
 - (D) Glyoxysome
16. The transport factors that help in the movement of molecules through the nuclear pores are known as
- (A) Nucleopherins
 - (B) Nucleoporins
 - (C) Karyopherins
 - (D) Karyoporins
17. Protein synthesis in an animal cell occurs
- (A) on ribosomes present in the cytoplasm as well as in mitochondria
 - (B) on ribosomes present in the nucleolus as well as in the cytoplasm
 - (C) only on ribosomes connected to the nuclear envelope and endoplasmic reticulum
 - (D) only on the ribosomes present in the cytosol
18. Which of the following enzymes remove supercoiling in replicating DNA ahead of the replication fork?
- (A) DNA polymerases
 - (B) Helicases
 - (C) Primases
 - (D) Topoisomerases

19. The information which is represented by a signal is detected by a specific receptor and converted to a cellular response; this conversion is called
- (A) Signal amplification
 - (B) Signal transversion
 - (C) Signal transduction
 - (D) Signal integration
20. Night blindness is caused due to the deficiency of
- (A) Vitamin E
 - (B) Vitamin A
 - (C) Vitamin B
 - (D) Vitamin K
21. Identify the protein present in hair, nails, and horns of animals
- (A) Keratin
 - (B) Globulin
 - (C) Chitin
 - (D) Histone
22. Which among the following is an excretory product of fishes?
- (A) Urea
 - (B) Ammonia
 - (C) Hippuric Acid
 - (D) Uric Acid
23. Central Nervous System is composed of
- (A) Brain and Heart
 - (B) Brain and Spinal Cord
 - (C) Spinal Cord and Lungs
 - (D) Brain and Lungs
24. Prothrombin which helps in clotting of blood is released by
- (A) Lymphocytes
 - (B) Blood Platelets
 - (C) Monocytes
 - (D) Erythrocytes

25. During Translation, which one of the following amino acid is first added to the P site of ribosome ?
- (A) Isoleucine
 - (B) Cysteine
 - (C) Tryptophan
 - (D) Methionine
26. Dengue fever is spread by
- (A) Anopheles mosquito
 - (B) Culex mosquito
 - (C) Aedes mosquito
 - (D) None of the above
27. Which one of the following is the respiratory organ in insects?
- (A) Lungs
 - (B) Trachea
 - (C) Gills
 - (D) Skin
28. Plague is spread by
- (A) Dogs
 - (B) Pigs
 - (C) Rats
 - (D) Mosquitoes
29. The process of transformation of a spermatid into a spermatozoan is called
- (A) Spermiogenesis
 - (B) Spermateleogenesis
 - (C) Spermatogenesis
 - (D) Sperm maturation
30. The establishment of national parks and sanctuaries come under
- (A) *in situ* conservation of biodiversity
 - (B) *ex situ* conservation of biodiversity
 - (C) Natural Development Plan of Biodiversity
 - (D) None of the above

31. Which one of the following microbes is a water pollution indicator?
- (A) *Escherichia coli*
 - (B) *Vibrio cholerae*
 - (C) *Pseudomonas* sp.
 - (D) *Bacillus* sp.
32. In persons addicted to alcohol, the liver gets damaged because it
- (A) is over stimulated to secrete more bile
 - (B) accumulates excess of fats
 - (C) has to detoxify the alcohol
 - (D) stores excess of glycogen
33. Which part/cells of the body is named as “Police Guard”?
- (A) Tonsils
 - (B) Skin
 - (C) Liver
 - (D) Leucocytes
34. Which of the following is the primary host of liver fluke?
- (A) Snail
 - (B) Cattle
 - (C) Pig
 - (D) Sheep
35. Coeloblastula is present in
- (A) Labeo
 - (B) Snakes
 - (C) Starfish
 - (D) Unio
36. Which of the following is of mesodermal origin?
- (A) Brain
 - (B) Heart
 - (C) Urinary Bladar
 - (D) Middle ear

37. Cleavage of fertilized egg cells was first explained by
- (A) Spallanzani
 - (B) Aristotle
 - (C) Hearwig
 - (D) Harvey
38. 'The Organizer concept' was proposed by
- (A) Axelorod
 - (B) Landsteiner
 - (C) Spemann
 - (D) Pavlov
39. Which of the following statements matches with parthenogenesis?
- (A) Death of sperm before fertilization
 - (B) Cleavage of egg without fertilization
 - (C) Mixing of sperm and egg in artificial embryonic medium
 - (D) Fertilization of egg by sperm inside the body
40. Identify the animal in which breeding occurs in the mouth
- (A) Sword Tail
 - (B) Platy
 - (C) Cichlids
 - (D) Cowbird
41. Construction of web by spider is an example for behaviour
- (A) Acquired
 - (B) Innate
 - (C) Imprinting
 - (D) All of the above
42. The hormone that regulates 'Dominance Heirarchy' is
- (A) Aldosterone
 - (B) Testosterone
 - (C) Estrogen
 - (D) Progestrone

43. Acoustic marking of territory is done by
- (A) Frog
 - (B) Seals
 - (C) Humming birds
 - (D) Both (A) and (B)
44. Chemical communication between the members of the same species is effected by
- (A) Alomone
 - (B) Kiramone
 - (C) Pheromone
 - (D) Hormone
45. Organism that helps to reduce ammonia load in a bio-fertilizer is
- (A) *Aeromonas*
 - (B) *Nitrosomonas*
 - (C) *Bacillus*
 - (D) *Rhizobium*
46. A nauplius is
- (A) Singular red eye found on copepods
 - (B) A specialized eating appendage
 - (C) The larval form of a copepod
 - (D) A type of parasitic copepod
47. Parasitic castration in crabs is caused by
- (A) *Trichodesmium*
 - (B) *Fusarium*
 - (C) *Sacculina*
 - (D) *Argulus*
48. Which one of the following is the source of Natural pearl?
- (A) Bivalve
 - (B) Prawn
 - (C) Crayfish
 - (D) Fish

49. An area where freshwater and saltwater meet is known as
- (A) Ocean
 - (B) Brackish Water
 - (C) River
 - (D) Lagoon
50. Vitamins often act as for biological reactions.
- (A) apoenzymes
 - (B) catalysts
 - (C) coenzymes
 - (D) holoenzymes
51. Death receptors belong to
- (A) Tumor necrosis factor (TNF) receptor
 - (B) Tumor growth factor (TGF) receptor
 - (C) Epidermal Growth factor (EGF) receptor
 - (D) Vascular Endothelial growth factor (VEGF)
52. Which hormone is measured to detect pregnancy?
- (A) Testosterone
 - (B) Chorionic Gonadotropin
 - (C) Progesterone
 - (D) Estrogen
53. Nobel Prize for physiology/medicine in 2018 was awarded for the work on cancer
- (A) Chemotherapy
 - (B) Immunotherapy
 - (C) Radio therapy
 - (D) DNA therapy
54. Hormones act through
- (A) Autocrine signaling
 - (B) Paracrine signaling
 - (C) Endocrine signaling
 - (D) All of the above

55. Which of the following is the secondary messenger in animal cells?
- (A) ATP
 - (B) AMP
 - (C) cATP
 - (D) cAMP
56. Which of the following is a causative factor for leukaemia in Mice and Human?
- (A) Bacteria
 - (B) Fungi
 - (C) Nematodes
 - (D) Viruses
57. The genetic material of Rous sarcoma virus is
- (A) DNA
 - (B) Extra chromosomal DNA
 - (C) RNA
 - (D) Both (A) and (B)
58. Identify the most common cancer among men
- (A) Lung cancer
 - (B) Breast cancer
 - (C) Brain cancer
 - (D) Testicular cancer
59. "Fish out" the scientist who proposed the 'ecological niche' concept
- (A) Odum
 - (B) Brown
 - (C) Beaudé
 - (D) Hooke
60. A colony of genetically identical cells derived from a single progenitor cell is known as
- (A) Recombination
 - (B) Cell division
 - (C) Cloning
 - (D) Cell regeneration

61. The professional phagocytosis is very common in
- (A) RBC
 - (B) WBC
 - (C) Platelets
 - (D) None of the above
62. The microvilli of small intestine participate in the uptake of oral suspension drugs through process
- (A) Phagocytosis
 - (B) Pinocytosis
 - (C) Drug mediated endocytosis
 - (D) All of the above
63. The best source of renewable energy is
- (A) Cattle
 - (B) Petroleum
 - (C) Coal
 - (D) Trees
64. Removal of top fertile soil by air or water is called
- (A) Siltation
 - (B) Soil erosion
 - (C) Weathering of Soil
 - (D) Leaching
65. Chipko movement is related to
- (A) conservation of natural resources
 - (B) tree/forest conservation
 - (C) plant breeding
 - (D) tiger conservation
66. The most stable ecosystem is
- (A) Ocean
 - (B) Forest
 - (C) Desert
 - (D) Mountain

67. The sphere of living matter along with water, soil and air on the surface of the earth is
- (A) Lithosphere
 - (B) Biosphere
 - (C) Hydrosphere
 - (D) Atmosphere
68. Who proposed the Biogenetic Law?
- (A) E. Haeckel
 - (B) Charles Darwin
 - (C) Karl von Bear
 - (D) Lamarck
69. The Head Quarters of National Institute of Oceanography (NIO) is at
- (A) Mumbai
 - (B) Goa
 - (C) Lucknow
 - (D) Chennai
70. In hybridoma technology, B-Cell is fused with
- (A) Kupffer Cell
 - (B) Myeloma Cell
 - (C) T-Cell
 - (D) Macrophage Cell
71. Total number of amino acids present in human insulin is
- (A) 51
 - (B) 60
 - (C) 40
 - (D) 55
72. The world's first successful Vaccine was invented by
- (A) Robert Koch
 - (B) Edward Jenner
 - (C) John Walker
 - (D) Kanyas

73. The first cloned mammal is a
- (A) Dog
 - (B) Cow
 - (C) Sheep
 - (D) Tiger
74. How much coding sequence is present in human genome?
- (A) 30%
 - (B) 3%
 - (C) 60%
 - (D) 90%
75. Ramachandran plot is related to
- (A) Carbohydrate
 - (B) Protein
 - (C) Lipid
 - (D) Minerals
76. Which of the following techniques is useful for isolating intact, functionally active mitochondria?
- (A) X-ray diffraction
 - (B) Differential centrifugation
 - (C) Electron microscopy
 - (D) X-ray crystallography
77. Cells that synthesise have abundant smooth endoplasmic reticulum.
- (A) proteoglycans
 - (B) steroids
 - (C) proteins
 - (D) glycoproteins
78. Centrosome, the main microtubule organizing centre of the cell, is duplicated during
- (A) interphase
 - (B) mitotic phase
 - (C) gap phase
 - (D) synthetic phase

79. Which of the following statements is **TRUE** of neurohypophysis?
- (A) It is a part of the hypothalamus and functions to secrete neurohormones
 - (B) It secretes two hormones, arginine vasopressin and oxytocin
 - (C) It is an exocrine tissue and doesn't secrete any hormone
 - (D) It acts as a neurohemal organ and stores hormones secreted by the hypothalamus
80. Prostaglandins are the derivatives of
- (A) membrane phospholipids
 - (B) membrane proteins
 - (C) diacyl glycerol
 - (D) inositol triphosphate
81. In which of the following mammalian cells are peroxisomes abundant?
- (A) Neurons
 - (B) Hepatocytes
 - (C) Skeletal muscles
 - (D) Chondrocytes
82. Erythropoietin, which is required for the production of RBCs is secreted from
- (A) liver
 - (B) kidney
 - (C) pancreas
 - (D) bone
83. Which of the following components of the plasma membrane determines its fluidity?
- (A) Sphingolipids
 - (B) Cholesterol
 - (C) Phospholipids
 - (D) Glycolipids
84. Mammary tissue is an example of
- (A) simple tubular gland
 - (B) compound alveolar gland
 - (C) branched tubular gland
 - (D) compound coiled, tubular gland

85. Which of the following cells are responsible for maintaining acidic conditions in the stomach?
- (A) Goblet cells
 - (B) Parietal cells
 - (C) Chief cells
 - (D) Enteroendocrine cells
86. In humans, which region of the adrenal gland secretes aldosterone?
- (A) Zona glomerulosa
 - (B) Zona fasciculata
 - (C) Zona reticularis
 - (D) Medulla
87. Which of the following stages of spermatogenesis will have maximum DNA content?
- (A) Primary spermatocytes
 - (B) Secondary spermatocytes
 - (C) Spermatids
 - (D) Spermatozoa
88. Notochord is a structure in vertebrate embryos that lies under the and is flanked by
- (A) ectodermal, neural tube, somites
 - (B) mesodermal, neural tube, somites
 - (C) endodermal, neural tube, somites
 - (D) mesodermal, ectoderm, endoderm
89. Which of the following organs synthesizes calcitriol, the active form of vitamin D?
- (A) Skin
 - (B) Kidneys
 - (C) Liver
 - (D) Thyroid
90. The process in which neighbouring cells influence the development of each other, either by direct contact or by secreting chemical signals is called
- (A) blastulation
 - (B) induction
 - (C) stimulation
 - (D) gastrulation

91. What is the primary function of cortical reaction or egg activation during fertilization?
- (A) To block polyspermy
 - (B) To secrete hyaluronidase
 - (C) To form a zygote nucleus
 - (D) To change the pH of the egg cytoplasm
92. Which of the following is a measure of dispersion that is based on the concept of a deviation from the mean?
- (A) Range
 - (B) Interquartile deviation
 - (C) Semi Interquartile range
 - (D) Standard deviation
93. Which of the following is an example of morphallaxis?
- (A) Regeneration of limb in a newt
 - (B) Regeneration of the whole body of hydra
 - (C) Regeneration of tails in a frog
 - (D) Regeneration of jaws in a salamander
94. Which of the following evolutionary periods has witnessed a major mass extinction of life, particularly marine life?
- (A) Carboniferous period of the Paleozoic era
 - (B) Permian period of the Paleozoic era
 - (C) Cretaceous period of the Mesozoic era
 - (D) Jurassic period of the Mesozoic era
95. The association between a dependent variable and an independent variable can be studied by using
- (A) student t-test
 - (B) chi-square test
 - (C) correlation coefficient test
 - (D) Mann-Whitney test
96. A compound that absorbs wavelength and emits wavelength of light can exhibit fluorescence.
- (A) shorter, shorter
 - (B) shorter, longer
 - (C) longer, shorter
 - (D) longer, longer

97. Animals belonging to which of the following taxa exhibit spiral cleavage?
- (A) Amphibians
 - (B) Mammals
 - (C) Annelids
 - (D) Echinoderms
98. The α -helices and β -sheets, which are three-dimensional arrangements of local segments of protein are referred to as
- (A) quaternary structure
 - (B) tertiary structure
 - (C) secondary structure
 - (D) primary structure
99. Which of the following phenomena is responsible for the evolution of different bill sizes, shapes, colouration and body size in Darwin's finches that were adapted to different Galapagos Islands?
- (A) Evolutionary convergence
 - (B) Evolutionary divergence
 - (C) Adaptive radiation
 - (D) Evolutionary parallelism
100. A geographically variable species often divided into many subspecies is referred to as
- (A) sibling species
 - (B) monotypic species
 - (C) paratypic species
 - (D) polytypic species
101. Honeybees carry pollen back to the colonies in the pollen basket situated on their
- (A) body
 - (B) front legs
 - (C) middle legs
 - (D) hind legs
102. A transient zone between two biomes is called
- (A) ecotype
 - (B) ecotone
 - (C) ecocline
 - (D) ecophene

103. Which of the following is **not** likely to be dependent on adult body size?
- (A) Area of habitat required to support reproductive activity
 - (B) Adaptability
 - (C) Generation time
 - (D) Number of reproductive events
104. Catecholamines and neurotransmitters are metabolized in the liver by and
- (A) deamination and decarboxylation
 - (B) deamination and amidation
 - (C) ortho-methylation and carboxylation
 - (D) ortho-methylation and oxidative deamination
105. The sub layer of earth consisting of its intensely hot core, a thick mantle composed mostly of rock and a thin outer crust is
- (A) Hydrosphere
 - (B) Troposphere
 - (C) Stratosphere
 - (D) Geosphere
106. What is the role of carbohydrate moieties in the plasma membrane?
- (A) Cell adhesion
 - (B) Cell- cell recognition
 - (C) Assisting transport across the membrane
 - (D) Cell storage reserve
107. Which of the following types of interactions stabilizes the plasma membrane?
- (A) Hydrophobic interactions
 - (B) Hydrophilic interactions
 - (C) Ionic bonds
 - (D) Covalent bonds
108. Plasmodesmata of plant cells are functionally equivalent to of animal cells.
- (A) gap junctions
 - (B) tight junctions
 - (C) adherence junctions
 - (D) desmosomes

109. is a zoonotic parasitic disease caused by tapeworms.
- (A) Fascioliasis
 - (B) Onchocerciasis
 - (C) Echinococcosis
 - (D) Cryptosporidiosis
110. Which of the following are **not** found in plant cells?
- (A) Mitochondria
 - (B) Glyoxisomes
 - (C) Centrosomes
 - (D) Golgi apparatus
111. In a light microscope, total magnification is obtained by
- (A) magnifying power of the objective lens
 - (B) magnifying power of the eyepiece
 - (C) magnifying power of condenser lens
 - (D) magnifying power of both objective lens and eyepiece
112. Which of the following features distinguishes hemichordates from chordates?
- (A) Pharyngeal gill slits
 - (B) Nervous system
 - (C) Notochord
 - (D) Three germ layers
113. Living fossils are the
- (A) organisms which have become fossils recently
 - (B) organisms that have become fossils while living
 - (C) ancient organisms persisting to modern times without further morphological evolution
 - (D) ancient organisms persisting to modern times with further morphological evolution
114. Which is the correct hierarchical sequence in taxonomy?
- (A) Kingdom, Phylum, Genus, Species, Class
 - (B) Kingdom, Phylum, Class, Genus, Species
 - (C) Phylum, Kingdom, Genus, Species, Class
 - (D) Species, Genus, Kingdom, Phylum, Class

115. A group of taxa that includes all descendant of a single ancestor is called
- (A) monophyletic
 - (B) paraphyletic
 - (C) polyphyletic
 - (D) symphyletic
116. Silverfish belongs to the phyla
- (A) Pisces
 - (B) Arthropoda
 - (C) Mollusca
 - (D) Echinodermata
117. What is the status of Red Panda as per the IUCN Red data book?
- (A) Vulnerable
 - (B) Endangered
 - (C) Critically endangered
 - (D) Extinct in the wild
118. Which of the following communities is the most productive in the biosphere?
- (A) Temperate forests
 - (B) Tropical forests
 - (C) Savannas
 - (D) Wetlands
119. Proteins can be visualized directly after electrophoresis in gels by
- (A) microscope
 - (B) exposing it to UV light
 - (C) staining them with dye
 - (D) exposing it to X-rays
120. Size Exclusion Chromatography (SEC) is the separation of bio-molecule mixtures based on
- (A) charge
 - (B) effective molecular radius
 - (C) polarity
 - (D) colour of the compound

121. The amount of light absorbed by a sample is measured using
- (A) polarimeter
 - (B) conductivity meter
 - (C) spectrophotometer
 - (D) densitometer
122. The maximum volume of air contained in the lungs as a result of a forced inhalation is called
- (A) tidal volume
 - (B) vital capacity
 - (C) ventilation rate
 - (D) total lung capacity
123. is/are primary criterion for classifying insects.
- (A) Wings
 - (B) Thorax
 - (C) Legs
 - (D) Antennae
124. Which of the following sets is of flightless birds?
- (A) Penguin, Peacock, Fowl, Rhea, Kiwi, Ostrich
 - (B) Rhea, Cassowary, Moa, Emu, Kiwi, Ostrich
 - (C) Albatross, Kiwi, Falcon, Emu, Ostrich
 - (D) Albatross, Hummingbird, Falcon, Hawk, Ostrich
125. Which of the following parasites sucks and ingests blood?
- (A) *Ancylostoma duodenale*
 - (B) *Enterobius vermicularis*
 - (C) *Ascaris lumbricoides*
 - (D) *Trichuris trichiura*
126. Which of the following is the weakest of all non-covalent interactions between molecules?
- (A) Hydrogen bond
 - (B) Van der Waals force
 - (C) Hydrophobic interaction
 - (D) Ionic interaction

127. The presence of 3 copies of chromosome number 18 in human somatic cells results in
- (A) Down's syndrome
 - (B) Patau syndrome
 - (C) Turner syndrome
 - (D) Edward syndrome
128. What is the composition of a nucleosome?
- (A) DNA, histone core protein, histone H1
 - (B) DNA, histone core protein
 - (C) RNA, histone core protein
 - (D) RNA, histone core protein, histone H1
129. Which of the following characteristics is **not** true of plasmid DNA?
- (A) A plasmid is a circular piece of DNA
 - (B) Plasmid has a wide molecular weight
 - (C) Every cell has only one copy of plasmid DNA
 - (D) Plasmid can be transferred from cell to cell
130. An essential amino acid is the one that
- (A) is readily available in the body
 - (B) the body can synthesize
 - (C) is essentially easy to synthesize
 - (D) the body cannot synthesize
131. A Punnett square is used to determine
- (A) the actual outcome of a cross
 - (B) the probable outcome of a cross
 - (C) result of segregation
 - (D) result of meiosis-I
132. The pH value at which the net charge on the molecule is zero is called
- (A) equilibrium point
 - (B) buffer point
 - (C) isoelectric point
 - (D) end point

133. Which of the following polysaccharides is the most important structural substance in insect and crustacean shells?
- (A) Starch
 - (B) Chitin
 - (C) Glycogen
 - (D) Murein
134. The epithelia that lines the excretory passage of the urinary tract is
- (A) Squamous epithelium
 - (B) Stratified squamous epithelium
 - (C) Transitional epithelium
 - (D) Pseudostratified squamous epithelium
135. Why is urea used during polyacrylamide gel electrophoresis?
- (A) To prevent DNA degradation
 - (B) To make DNA molecules negatively charged
 - (C) To keep DNA molecules denatured
 - (D) To make DNA molecules positively charged
136. Which part of the brain is responsible for balancing and posture of the body?
- (A) Cerebrum
 - (B) Cerebellum
 - (C) Medulla oblongata
 - (D) Spinal cord
137. Bio-fuels are being increasingly used as these are
- (A) more affordable
 - (B) water-efficient
 - (C) less polluting and renewable
 - (D) having more energy content
138. The sponges are believed to be primitive metazoan whose organization is at the
- (A) tissue level
 - (B) cellular level
 - (C) organ-system level
 - (D) triploblastic level

139. In evolutionary terms, two organisms that are more closely related are
- (A) more similar in their habitats
 - (B) less similar in their DNA sequences
 - (C) those that recently shared a common ancestry
 - (D) similar in their size
140. Which of the following binds to calcium during excitation-contraction coupling?
- (A) Actin
 - (B) Myosin
 - (C) Tropomyosin
 - (D) Troponin
141. A substance B is transported into the cell with the help of membrane proteins only. It can only travel with the concentration gradient. This is called
- (A) diffusion
 - (B) facilitated diffusion
 - (C) osmosis
 - (D) bulk transport
142. cannot be detected in the developing embryo by amniocentesis.
- (A) Jaundice
 - (B) Klinefelter's syndrome
 - (C) Sex of the foetus
 - (D) Down's syndrome
143. Which of the following silkworm diseases is caused by a virus?
- (A) Infectious flacherie
 - (B) Muscardine
 - (C) Pebrine
 - (D) Grasserie
144. Which of the following is the most common symptom of visceral leishmaniasis?
- (A) Swollen arms and legs without any skin ulcers
 - (B) Swollen face and lips with red skin ulcers
 - (C) Swollen spleen and liver with black skin ulcers
 - (D) Swollen spleen and kidneys with brown skin ulcers

145. Polymerase chain reaction requires
- (A) thermally stable RNA polymerase
 - (B) thermally stable DNA polymerase
 - (C) thermally unstable RNA polymerase
 - (D) thermally unstable DNA polymerase
146. Animals belonging to which of the following phyla exhibit bilateral symmetry during the larval stage and radial symmetry during the adult stage?
- (A) Coelenterata
 - (B) Nematoda
 - (C) Echinodermata
 - (D) Mollusca
147. Which of the following groups of animals taxa exhibit bilateral symmetry in their body organization?
- (A) Only Annelids
 - (B) Only Arthropods
 - (C) Only Vertebrates
 - (D) Annelids, Arthropods and Vertebrates
148. Which of the following disease-causing protozoan enters the body by the consumption of under-cooked meat?
- (A) *Entamoeba histolytica*
 - (B) *Plasmodium vivax*
 - (C) *Toxoplasma gondii*
 - (D) *Giardia lamblia*
149. Which of the following nematodes is monogenetic parasite?
- (A) *Ascaris lumbricoides*
 - (B) *Wuchereria bancrofti*
 - (C) *Trichinella spiralis*
 - (D) *Dracunculus medinensis*
150. Which of the mitochondrial enzymes is responsible for destroying H_2O_2 and preventing the formation of ROS?
- (A) Hydroxylase
 - (B) Carboxylase
 - (C) Catalase
 - (D) Superoxide dismutase

ANSWER KEY

Subject Name: 615 ZOOLOGY

SI No.	Key	SI No.	Key	SI No.	Key	SI No.	Key	SI No.	Key
1	B	31	A	61	B	91	A	121	C
2	B	32	B	62	B	92	D	122	D
3	C	33	A	63	D	93	B	123	C
4	D	34	D	64	B	94	B	124	B
5	C	35	C	65	B	95	C	125	A
6	B	36	B	66	A	96	B	126	B
7	D	37	A	67	B	97	C	127	D
8	A	38	C	68	A	98	C	128	A
9	C	39	B	69	B	99	C	129	C
10	B	40	C	70	B	100	D	130	D
11	A	41	B	71	A	101	D	131	B
12	C	42	B	72	B	102	B	132	C
13	D	43	D	73	C	103	B	133	B
14	D	44	C	74	B	104	D	134	C
15	C	45	B	75	B	105	D	135	C
16	B	46	C	76	B	106	B	136	B
17	C	47	C	77	B	107	A	137	C
18	D	48	A	78	D	108	A	138	B
19	C	49	B	79	D	109	C	139	C
20	B	50	C	80	A	110	C	140	D
21	A	51	A	81	B	111	D	141	B
22	B	52	B	82	B	112	C	142	A
23	B	53	B	83	B	113	C	143	A
24	B	54	C	84	B	114	B	144	C
25	D	55	D	85	C	115	A	145	B
26	C	56	D	86	A	116	B	146	C
27	B	57	C	87	A	117	B	147	D
28	C	58	A	88	B	118	B	148	C
29	C	59	A	89	B	119	C	149	A
30	A	60	C	90	B	120	B	150	C