

ZOOLOGY
(FINAL)

1. Renal portal system is absent in which of the following groups?
 - (A) Amphibians
 - (B) Reptiles
 - (C) Aves
 - (D) Mammals

2. Graafian follicles are found in
 - (A) Cervix
 - (B) Uterus
 - (C) Oviduct
 - (D) Ovary

3. Gluconeogenesis refers to
 - (A) Conversion of proteins and fats into glucose
 - (B) Conversion of glycogen into glucose
 - (C) Conversion of glucose into glycogen
 - (D) None of the above

4. The claspers of shark are modified
 - (A) Pectoral fins
 - (B) Dorsal fins
 - (C) Pelvic fins
 - (D) Caudal fin

5. Which of the following is the larva of starfish?
 - (A) Auricularia
 - (B) Glochidium
 - (C) Trochophore
 - (D) Bipinnaria

6. Respiratory organs of peripatus are
 - (A) Coxal gland
 - (B) Book lungs
 - (C) Crural gland
 - (D) Trachea

7. Antibacterial enzyme “Lysozyme” is secreted by
- (A) Pancreas
 - (B) Gastric glands
 - (C) Intestinal glands
 - (D) Salivary glands
8. Initiation codons for protein synthesis are
- (A) UUU and GGG
 - (B) AUG and GUA
 - (C) AAU and UAA
 - (D) GUG and AUG
9. In eukaryotes, a DNA sequence for a functional gene is called
- (A) Exon
 - (B) Muton
 - (C) Intron
 - (D) Cistron
10. Hemophilia and Colour blindness are
- (A) Sex-linked dominant traits
 - (B) Sex-linked recessive traits
 - (C) Autosomal dominant traits
 - (D) Sex-limited traits
11. During cell division, nuclear membrane is formed by
- (A) Endoplasmic reticulum
 - (B) Plasma membrane
 - (C) Nucleolus
 - (D) Ribosome
12. The type of chromosome in which centromere is located at the tip is called
- (A) Telocentric
 - (B) Sub-metacentric
 - (C) Acrocentric
 - (D) Metacentric

13. NEERI is the abbreviated name for
- (A) National Ethological and Ecological Research Institute
 - (B) National Eugenics and Ecological Research Institute
 - (C) National Environmental and Engineering Research Institute
 - (D) National Ethological and Environment Research Institute
14. Synecology deals with
- (A) Ecology of species
 - (B) Ecology of Communities
 - (C) Ecology of populations
 - (D) None of the above
15. Name the proteins present in silk
- (A) Actin and Myosin
 - (B) Fibrin and Fibrinogen
 - (C) Fibroin and Sericin
 - (D) None of the above
16. Which type of canal system is found in *Leucosolenia*?
- (A) Ascon
 - (B) Leucon
 - (C) Rhagon
 - (D) Syconoid
17. The term “shell-fish” includes
- (A) Prawns and lobsters
 - (B) Crabs and oysters
 - (C) Clams and mussels
 - (D) All of the above
18. The sequence of origin of life is
- (A) Amino acids-proteins-chlorophyll
 - (B) Chlorophyll-Starch-Glycogen
 - (C) Nucleic acid-amino acids-chlorophyll
 - (D) Chlorophyll-Nucleic acid-amino acid

19. Pituitary gland does not control the secretory activity of
- (A) Adrenal medulla
 - (B) Thyroid
 - (C) Adrenal cortex
 - (D) Ovary
20. Which of the following is not a catfish?
- (A) *Clarius batrachus*
 - (B) *Channa stratus*
 - (C) *Wallago attu*
 - (D) *Labeo rohita*
21. Respiratory acidosis results from
- (A) Low levels of CO₂ in the blood
 - (B) High levels of CO₂ in the blood
 - (C) High levels of lactate in the blood
 - (D) Low levels of lactate in the blood
22. Which of the following processes is active in fasting state?
- (A) Gluconeogenesis
 - (B) Lipogenesis
 - (C) Glycogenesis
 - (D) Ketogenesis
23. Major aerosol pollutant generated by refrigerators is
- (A) SO₂
 - (B) CH₄
 - (C) CCl₄
 - (D) CFCs
24. Which of the following is an example of *ex-situ* conservation?
- (A) Wild life sanctuaries
 - (B) Sacred grooves
 - (C) Seed bank
 - (D) National park

25. Ankylosaurus is also known as
- (A) Flying dinosaur
 - (B) Armoured dinosaur
 - (C) Horned Dinosaur
 - (D) Apatosaurus
26. Which of the following is a limbless amphibian?
- (A) Ichthyophis
 - (B) Proteus
 - (C) Salamander
 - (D) Ambystoma
27. Jacobson's organ is concerned with
- (A) Smell
 - (B) Touch
 - (C) Hearing
 - (D) Sight
28. Which of the following is a fungal disease of silkworm?
- (A) Flacherie
 - (B) Muscardine
 - (C) Grasserie
 - (D) Pebrine
29. How many cervical vertebrae are present in mammals?
- (A) 16
 - (B) 10
 - (C) 12
 - (D) 7
30. Which of the following is a homeothermic animal?
- (A) Fish
 - (B) Frog
 - (C) Lizard
 - (D) None of the above

31. Which of the following is a RNA-dependant DNA polymerase?
- (A) Transcriptase
 - (B) Restriction Endonuclease
 - (C) Reverse transcriptase
 - (D) Transferase
32. Which of the following is a freshwater form?
- (A) *Mytilus*
 - (B) *Sepia*
 - (C) *Unio*
 - (D) *Loligo*
33. DNA finger-printing was developed by
- (A) Fredrick Sanger
 - (B) James D. Watson
 - (C) Alec J. Jaffery
 - (D) Thomas H. Morgan
34. Acromegaly is caused by
- (A) Excess of somatotrophic hormone
 - (B) Deficiency of thyroxin
 - (C) Excess of corticotrophin
 - (D) Excess of adrenaline
35. In pancreas, the cells that secrete digestive enzymes are arranged in clusters called
- (A) Islets
 - (B) Crypts
 - (C) Acini
 - (D) Delta cells
36. Which of the following is a true coelomate?
- (A) Roundworm
 - (B) Tapeworm
 - (C) Hookworm
 - (D) Earthworm

37. Amnocoete is the larval form of
- (A) *Petromyzon*
 - (B) *Balanoglossus*
 - (C) *Branchiostoma*
 - (D) *Hippocampus*
38. The color of oxygenated haemocyanin, a respiratory pigment in mollusks, is
- (A) Red
 - (B) Green
 - (C) Blue
 - (D) Colorless
39. Which one of the following is not a mammalian character in Platypus?
- (A) Presence of mammary glands
 - (B) Presence of cloaca
 - (C) Presence of sebaceous glands
 - (D) Presence of hair
40. Podocyte cells are found in
- (A) Ducts of Bellini
 - (B) Glomeruli
 - (C) Bowman's Capsule
 - (D) Distal convoluted tubule
41. *Amphioxus* (Branchiostomata) belongs to the group
- (A) Hemichordate
 - (B) Cephalochordata
 - (C) Urochordata
 - (D) Vertebrata
42. The "Red Data Book" is published by
- (A) Convention on International Trade in Endangered Species of Wild Fauna and Flora
 - (B) International Union for Conservation of Nature and Natural Resources
 - (C) National Wild Life Plan
 - (D) National Environmental Engineering Research Institute

43. Eutrophication results in the reduction of
- (A) Mineral salts
 - (B) Dissolved Hydrogen
 - (C) Dissolved Oxygen
 - (D) Dissolved Nitrates
44. The tendency of two genes remaining together on a chromosome during crossing over is known as
- (A) Gene mapping
 - (B) Recombination
 - (C) Linkage
 - (D) Genotype
45. Alzheimer's disease in humans is associated with the deficiency of
- (A) Acetylcholine
 - (B) GABA
 - (C) Glutamic acid
 - (D) Dopamine
46. The fins in Ichthyosaurus and dolphin represent
- (A) Convergent evolution
 - (B) Microevolution
 - (C) Divergent evolution
 - (D) Co-evolution
47. Transition zone between two ecosystems is
- (A) Ecotype
 - (B) Niche
 - (C) Ecotone
 - (D) Biome
48. Muga silk is produced by
- (A) *Bombyx mori*
 - (B) *Antheraea mylitta*
 - (C) *Antheraea assamensis*
 - (D) *Antheraea pernyi*

49. Bar eye mutation in *Drosophila* is due to
- (A) Deletion
 - (B) Translocation
 - (C) Duplication
 - (D) Inversion
50. Migration of fish from sea to freshwater for spawning is known as
- (A) Anadromous migration
 - (B) Catadromous migration
 - (C) Omnidromous migration
 - (D) Amphidromous migration
51. Suicide bags of the eukaryotic cells are
- (A) Golgi bodies
 - (B) Endoplasmic reticulum
 - (C) Mitochondria
 - (D) Lysosomes
52. *Aurelia* belongs to the class
- (A) Scyphozoa
 - (B) Anthozoa
 - (C) Hydrozoa
 - (D) Sporozoon
53. The venom glands of a snake are modified
- (A) Buccal glands
 - (B) Parotid glands
 - (C) Palatine glands
 - (D) Lacrimal glands
54. Which of the following glands is related with immunity?
- (A) Pineal
 - (B) Adrenal
 - (C) Thyroid
 - (D) Thymus

55. Which of the following is a sedentary polychaete?
- (A) *Nereis*
 - (B) *Aphrodita*
 - (C) *Polynoe*
 - (D) *Terebella*
56. The theory of inheritance of acquired characters was proposed by
- (A) Darwin
 - (B) Lamarck
 - (C) De Vries
 - (D) Weismann
57. Which of the following is commonly known as 'Portuguese man of war'?
- (A) *Obelia*
 - (B) *Hydra*
 - (C) *Aurelia*
 - (D) *Physalia*
58. In molluscs, the radula is related to the
- (A) Digestive system
 - (B) Respiratory system
 - (C) Excretory system
 - (D) Reproductive system
59. The father of white revolution in India is
- (A) Salim Ali
 - (B) Birbal Sahani
 - (C) Varghese Kurien
 - (D) Sunderlal Hora
60. PCR – Polymerase chain reaction – is useful in
- (A) Cutting a specific segment of DNA
 - (B) Amplifying a specific segment of DNA
 - (C) Splicing a specific segment of DNA
 - (D) All of the above

61. *Erythroblastosis foetalis* is also called
- (A) Sick cell anaemia
 - (B) Bleeder's disease
 - (C) Proton defect
 - (D) Haemolytic disease of the new-born
62. Scientific name of our National bird is
- (A) *Pavo cristatus*
 - (B) *Columba livia*
 - (C) *Gallus gallus*
 - (D) *Corvus splendens*
63. The process of digestion proceeds in the order
- (A) Digestion → Ingestion → Solution → Absorption → Egestion
 - (B) Ingestion → Digestion → Absorption → Assimilation → Egestion
 - (C) Ingestion → Solution → Absorption → Accumulation → Egestion
 - (D) Ingestion → Digestion → Absorption → Solution → Egestion
64. Which of the following is a living fossil?
- (A) *Euglena*
 - (B) *Sycon*
 - (C) *Limulus*
 - (D) *Balanoglossus*
65. In birds, the flight muscles are attached to the
- (A) Synsacrum
 - (B) Pygostyle
 - (C) Sternum
 - (D) Thoracic mass
66. Both Polyp and medusa are found in
- (A) Hydrozoans
 - (B) Scyphozoans
 - (C) Anthozoans
 - (D) All coelenterates

67. Wings of insects and birds are examples of
- (A) Analogous organs
 - (B) Homologous organs
 - (C) Vestigial organs
 - (D) Divergent evolution
68. Which of the following organs synthesizes urea?
- (A) Duodenum
 - (B) Kidney
 - (C) Liver
 - (D) Pancreas
69. Gills are covered by operculum in
- (A) Cartilaginous fishes only
 - (B) Bony fishes only
 - (C) Both Cartilaginous fishes and bony fishes
 - (D) Fishes and aquatic reptiles
70. Which of the following statements is correct about frog?
- (A) Adults are ammonotelic and larvae are ureotelic
 - (B) Larvae are ammonotelic and adults are ureotelic
 - (C) Both adult and larva are ammonotelic
 - (D) Both adult and larva are ureotelic
71. The number and sequence of amino acids in a protein molecule are determined by the
- (A) DNA molecule
 - (B) mRNA molecule
 - (C) Enzymes involved in the process of translation
 - (D) rRNA molecule
72. ABO – blood grouping in man is controlled by
- (A) Multiple alleles
 - (B) Multiple genes
 - (C) Sex – linked genes
 - (D) Y- linked genes

73. In a polysaccharide, the individual monosaccharides are linked by a
- (A) Glycosidic bond
 - (B) Ester bond
 - (C) Hydrogen bond
 - (D) Phosphodiester bond
74. Acrosome is derived from the
- (A) Mitochondria
 - (B) Golgi apparatus
 - (C) Ribosomes
 - (D) Lysosomes
75. Calcium levels decrease in blood due to hyposecretion of
- (A) Parathyroid hormone
 - (B) Calcitonin
 - (C) Thyroxine
 - (D) Adrenaline
76. Pyridoxal phosphate serves as transient carriers of
- (A) Electrons
 - (B) Acyl groups
 - (C) Hydrides
 - (D) Amino groups
77. Glycolytic pathway occurs in
- (A) Chloroplast
 - (B) Glyoxysomes
 - (C) Mitochondria
 - (D) Cytosol
78. Number of maximum possible isomers for fructose is
- (A) 4
 - (B) 8
 - (C) 16
 - (D) 32

79. The leakage of blood, lymph, or other fluid from a blood vessel into the tissue is called
- (A) Necroptosis
 - (B) Anoikis
 - (C) Extravasation
 - (D) Metastasis
80. It is the only class of intercellular junctions in plants that directly connect the cytoplasm of adjacent cells
- (A) Connexin
 - (B) Plasmodesmata
 - (C) ICAM
 - (D) Selectin
81. Which anti-cancer drug interferes with breakdown of microtubules required for cell division?
- (A) Methotrexate
 - (B) Etoposide
 - (C) 5-fluorouracil
 - (D) Paclitaxel
82. If a *Drosophila* embryo doesn't have head and thorax, it is due to the absence of the gene
- (A) Torso
 - (B) Vasa
 - (C) Oskar
 - (D) Bicoid
83. Cells that are able to self-renew by dividing and developing into the three primary groups of cells that make up a human body
- (A) Pluripotent
 - (B) Totipotent
 - (C) Determined
 - (D) Differentiated

84. Which of the following is a conceptual domain that generates intercellular signaling molecules to induce the dorsal organizer in early embryonic development?
- (A) Brachet's cleft
 - (B) Nieuwkoop center
 - (C) Spemann's organizer
 - (D) Hensen's node
85. Which of the following methods is involved in randomly breaking up the genome into small DNA fragments that are sequenced individually?
- (A) Shot gun sequencing
 - (B) Illumina sequencing
 - (C) 454 sequencing
 - (D) Sequencing of BAC libraries
86. Which type of immunological application is used for either monoclonal or polyclonal antibodies?
- (A) ELISA
 - (B) Bacterial agglutination
 - (C) Diagnostic tissue typing
 - (D) None of the above
87. RACE method is used for
- (A) DNA-protein interaction
 - (B) FAM
 - (C) Determining the ends of mRNA
 - (D) Construction of synthetic DNA
88. Which one of the following techniques is used to study the RNA?
- (A) Northern blotting
 - (B) In situ hybridization
 - (C) Southern blotting
 - (D) Western blotting
89. A researcher would like to purify specific cell populations based on phenotypes detected by flow cytometry. Which one of the following methods would be best suited for the purpose?
- (A) Immunofluorescence microscopy
 - (B) Fluorescence in situ hybridization
 - (C) Enzyme linked immunosorbent assay
 - (D) Fluorescence activated cell sorting

90. What statistical test is used for analysing categorical data from inheritance studies?
- (A) Standard deviation
 - (B) Coefficient variation
 - (C) Chi-square test
 - (D) t-Test
91. Who is regarded as the father of biostatistics?
- (A) Fischer
 - (B) Karl Pearson
 - (C) Francis Galton
 - (D) Francis Bacon
92. A bag contains 10 black and 20 white balls, a ball is drawn at random. What is the probability that it is black?
- (A) $\frac{1}{2}$
 - (B) $\frac{1}{3}$
 - (C) 0
 - (D) 3
93. Which of the following is a neurotransmitter and a modulator of pain perception by altering cellular signaling pathway?
- (A) Neurotensin
 - (B) Enkephalin
 - (C) Serotonin
 - (D) Substance P
94. Which one of the following converts polypeptide to amino acids?
- (A) Erepsin
 - (B) Steapsin
 - (C) Pepsin
 - (D) Enterokinase
95. Which one of the following stimulates melanocytes to produce melanin?
- (A) Adrenocorticotrophic hormone
 - (B) β -lipotropin
 - (C) α -melanocyte-stimulating hormone
 - (D) β -endotropin

96. Which one of the following hormones is responsible for the regulation of iron recycling and iron balance?
- (A) Cobalophilin
 - (B) Hephaestin
 - (C) Hepcidin
 - (D) Na⁺-cotransporter
97. Which of the following plays a central role in the coagulation cascade at the point of convergence of the intrinsic and extrinsic pathways?
- (A) Albumin
 - (B) Stuart-Prower factor
 - (C) Antihemophilic factor
 - (D) Hageman factor
98. Which of the following is responsible for allowing you to feel pleasure, satisfaction and motivation?
- (A) Epinephrine
 - (B) Acetylcholine
 - (C) Dopamine
 - (D) Norepinephrine
99. A molecule capable of eliciting an immune response by an organism's immune system is called
- (A) Carrier
 - (B) Antigen
 - (C) Hapten
 - (D) Immunogen
100. A lipid mediator that plays a pivotal role in acute and chronic inflammation and allergic diseases is
- (A) Thromboxane
 - (B) Leukotriene
 - (C) TGFβ
 - (D) Chondroitin
101. brings changes on bacterial surface by making it more gram positive
- (A) Phagocytosis
 - (B) Release of antibodies like IgG
 - (C) Antibody mediated agglutination
 - (D) Anti-microbial peptides

102. induces cell death to eliminate viruses and tumor cells
- (A) Interferon lamda
 - (B) Peroxynitrite
 - (C) Lysozyme
 - (D) Granzyme
103. The phagocytes were discovered by
- (A) Edward Jenner
 - (B) Elie Metchnikoff
 - (C) Louis Pasteur
 - (D) Robert Koch
104. Which one is the primary inhibitory neurotransmitter for the central nervous system?
- (A) Serotonin
 - (B) GABA
 - (C) Dopamine
 - (D) IL 8
105. An association between two organisms in which one benefits and the other derives neither benefit nor harm is
- (A) Parasitism
 - (B) Mutualism
 - (C) Competition
 - (D) Commensalism
106. A state characterised by low metabolic process in animals during summer is
- (A) Aestivation
 - (B) Concealment
 - (C) Mimicry
 - (D) Hibernation
107. Re-establishment in a devastated forest over a long time proceeds in the order
- (A) Grasses → herbs and shrubs → woody trees
 - (B) Herbs and shrubs → grasses → woody trees
 - (C) Herbs and shrubs → woody trees → grasses
 - (D) Grasses → woody trees → herbs and shrubs

108. Lower trophic level in a biological network affects the community structure of a higher trophic level by means of
- (A) Bottom-up control
 - (B) Eutrophication
 - (C) Top-down control
 - (D) Trophic pyramid
109. Place of a living organism in the biotic environment and its relation to food and enemies is called
- (A) Niche
 - (B) Biotas
 - (C) Trophic level
 - (D) Habitat
110. Which of the following describes the situation in which co-occurring species share parts of their niche space with each other?
- (A) Niche differentiation
 - (B) Niche complementarity
 - (C) Niche overlap
 - (D) Amount of limiting resource is greater than the number of species
111. Modern fauna diversification occurred during
- (A) Cenozoic
 - (B) Cretaceous
 - (C) Paleozoic
 - (D) Quaternary
112. The environmental agreement on the control of transboundary movement of hazardous wastes and their disposal is
- (A) Basel convention
 - (B) Cartagena protocol
 - (C) Kyoto protocol
 - (D) Stockholm convention
113. The key protected animal present in Jaldapara National Park, West Bengal is
- (A) Indian Rhinoceros
 - (B) Hangul
 - (C) Feral Horse
 - (D) Asiatic Lion

114. Which one of the following is a critically endangered species?
- (A) White bellied Heron
 - (B) Ganges river dolphin
 - (C) Gaur
 - (D) Clouded leopard
115. Who said “Earth’s geology and natural history have been shaped by periods of catastrophic extinction and new creations”?
- (A) Wallace
 - (B) Lyell
 - (C) Lamark
 - (D) Cuvier
116. The change in frequency of an existing gene variant in the population due to random chance is called
- (A) Mutation
 - (B) Random mating
 - (C) Genetic drift
 - (D) Natural selection
117. Aposematism in animals is
- (A) Acquiring food
 - (B) Avoiding predation
 - (C) Territory defence
 - (D) Thermoregulation
118.refers to the same or similar characters or phenotypes produced by species from independent lineages under similar selective pressures
- (A) Adaptive convergence
 - (B) Parallel evolution
 - (C) Adaptive radiation
 - (D) Co-adaptation
119. Individual behavior where fitness of other increases at the expense of self
- (A) Agonistic behavior
 - (B) Hierarchical behavior
 - (C) Altruistic behavior
 - (D) Cooperative behavior

120. The food of Barn swallow bird mainly includes
- (A) Fruits
 - (B) Insects
 - (C) Nectar
 - (D) Seeds
121. Which rule/effect states that body form or shape is linear in warm climates and more rounded and compact in cold climates?
- (A) Allen's rule
 - (B) Bergmann's rule
 - (C) Allee effect
 - (D) Hamilton's rule
122. A specific type of natural selection that actively selects against the intermediate in a population, favoring both extremes of the spectrum is called
- (A) Neutral selection
 - (B) Disruptive selection
 - (C) Directional selection
 - (D) Stabilizing selection
123. Maximum number of animal species belong to
- (A) Mammalia
 - (B) Aves
 - (C) Pisces
 - (D) Arthropoda
124. The web of the spider is made up of
- (A) Carbohydrate polymers
 - (B) Proteins
 - (C) Lipids
 - (D) Polysaccharides
125. Which of the following is an example of bilaterally symmetrical and triploblastic animal?
- (A) Cnidarians
 - (B) Sponges
 - (C) Ctenophores
 - (D) Round worms

126. A characteristic feature unique to the members of phylum Coelenterata is the presence of
- (A) Nematocysts
 - (B) Flame cells
 - (C) Hermaphroditism
 - (D) Polymorphism
127. Cnidarians, which exhibit only the polyp body form are
- (A) Cubozoa
 - (B) Scyphozoa
 - (C) Anthozoa
 - (D) Hydrozoa
128. The group of molluscs, which possess eyes similar to vertebrates is
- (A) Bivalvia
 - (B) Gastropoda
 - (C) Cephalopoda
 - (D) Pelecypoda
129. Excretion is performed by in flatworms
- (A) Protonephridia
 - (B) Flame cells
 - (C) Green cells
 - (D) Malpighian tubules
130. Phylum Annelida is NOT characterised by
- (A) Segmentation
 - (B) Closed circulatory system
 - (C) Pseudocoelom
 - (D) Ventral nerve cord
131. Prawns and butterflies belong to the same phylum because of the presence of
- (A) Bilateral symmetry
 - (B) Jointed legs
 - (C) Antennae
 - (D) Segmented body

132. Which is not an example of one sided symbiotic relationship?
- (A) Cattle egret and cattle
 - (B) A hermit crab and an empty seashells
 - (C) A spider on a tree
 - (D) Tapeworm in host's stomach
133. The notochord is a structure in vertebrate embryos that lies under the, and is flanked by
- (A) Mesodermal, neural tube, somites
 - (B) Endodermal, mesoderm, the gut
 - (C) Ectodermal, neural tube, mesoderm
 - (D) Mesodermal, ectoderm, endoderm
134. Centrum, pre and post-zygapophysis and transverse process are parts of
- (A) Skull of frog
 - (B) Vertebrae of frog
 - (C) Sternum of frog
 - (D) Pectoral girdle of frog
135. Petromyzon is a connecting link between
- (A) Balanoglossus and Amphioxus
 - (B) Amphioxus and cyclostomata
 - (C) Cyclostoma and pisces
 - (D) Pisces and amphibians
136. Ancestors of Cyclostomes are
- (A) Myxinoidea
 - (B) Arthropods
 - (C) Ostracoderms
 - (D) Urochordates
137. Spinal deformities in farmed fish occur due to the deficiency of
- (A) Vitamin A
 - (B) Vitamin C
 - (C) Vitamin B
 - (D) Vitamin D

138. Which of the following is NOT a micronutrient?
- (A) Mn
 - (B) Cu
 - (C) Mg
 - (D) Bo
139. The method of rearing *Daphnia* in a culture medium made up of soil, manure and water is known as
- (A) Autotrophic
 - (B) Detrital
 - (C) Xenic
 - (D) Axenic
140. In India, the peak breeding season of common carp is
- (A) Summer
 - (B) Winter
 - (C) Monsoon
 - (D) None of the above
141. Free swimming larvae of feed on mucous of their parents
- (A) Angel
 - (B) Severum
 - (C) Goldfish
 - (D) Discus
142. Adults of *Lates calcarifer* migrate towards for spawning
- (A) River
 - (B) Estuary
 - (C) Sea
 - (D) Origin of river
143. Paddle wheel aerator is an example of type of aerator
- (A) Diffuser
 - (B) Gravity
 - (C) Surface
 - (D) Turbine

144. Polyculture of fishes was first developed in
- (A) India
 - (B) China
 - (C) Thailand
 - (D) Taiwan
145. Aphids-small, sap-sucking insects - show
- (A) Ovipary
 - (B) Vivipary
 - (C) Paedogenesis
 - (D) Parthenogenesis
146. Which of the following insects is an efficient pollinator?
- (A) *Apis cerana*
 - (B) *Syrphus* sp.
 - (C) Bumble bee
 - (D) Hawk moth
147. Which of the following pests is believed to be migrated from India?
- (A) *Rhizopertha dominica*
 - (B) *Callosobrochus chinensis*
 - (C) *Tribolium castaneum*
 - (D) *Sitophilus oryzae*
148. Wing is the lateral extension of
- (A) Integument
 - (B) Cuticle
 - (C) Basement membrane
 - (D) Epidermis
149. Wota trap is used for
- (A) Stored grain pests
 - (B) Groundnut leaf miner
 - (C) Coffee berry borer
 - (D) Mosquito and flies

150. Pollination by beetles is known as

- (A) Melittophily
- (B) Myophily
- (C) Cantharophily
- (D) Myrmecophily

FOR REFERENCE ONLY - CUSAT

FINAL ANSWER KEY**Subject Name: ZOOLOGY**

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