

Padasalai.Net - 11th Study Material

XI- BIO ZOOLOGY ONE MARK STUDY MATERIAL

1. omnivores, nocturnal, living in damp.
a) Fishing b) Cockroach c) Cursorial d) Vectors
2. Nephridia of Earthworms are performing the same functions as
a) Gills of prawn b) Flame cells of Planaria
c) Trachea of insects d) Nematoblasts of Hydra
3. are not present in Lampito mauritii (earthworms.)
a) Intestinal caecae b) Vermicasts c) Respiratory organs d) Oxygen
4. Column I represents diseases and column II represents their symptoms. Choose the correctly paired option

| | |
|---------------|---|
| Column I | Column II |
| (P) Asthma | (i) Recurring of bronchitis |
| (Q) Emphysema | (ii) Accumulation of W.B.CS in alveolus |
| (R) Pneumonia | (iii) Allergy |
5. Which type of movement occurs in the respiratory passages and genital tracts?
A) Macrophages b) Ciliary movement
c) Flagellar movement d) Muscular movement
6. It is a character of organ level of organization.
a) There is division of labour among the cells and different types of cells are functionally isolated
b) The cells of a tissue integrate in a highly coordinated fashion to perform a common function, due to the presence of nerve cells and sensory cells
c) Highly specialized nerve and sensory cells coordinate and integrate the functions
d) All of the above
7. The includes pre-oral cavity, mouth, pharynx and oesophagus.
a) Gynovalvular plates b) Foregut c) Crop d) Proventriculus
8. Each skeletal muscle is covered by
a. epimysium b. perimysium c. endomysium d. hypomysium
9. Toxic urea can be removed from the blood by a process _____.
a) Haemodialysis b) Kidney transplantation
c) Joseph E d) Atrial natriuretic peptide
10. How is circulatory system seen in arthropods, molluscs, echinoderms, and urochordates?
a) The blood remains filled in tissue spaces due to the absence of blood capillaries
b) The blood is circulated through blood vessels of varying diameters
c) Both of these
d) None of these
 11. Which are thin walled and consist of single layer of squamous epithelium?
a) Capillaries b) Veins c) Coronary artery d) Open circulatory system
12. Which regulates sleep and wake cycle?
a) Epithalamus b) Choroid plexus c) Pineal body d) Melatonin
13. of marine fishes produce little urine.
a) Crustaceans b) Nephron c) Agglomerular kidneys d) 120-170 grams
14. If Henles loop were absent from mammalian nephron, which one of the following is to be expected?
a. There will be no urine formation
b. There will be hardly any change in the quality and quantity of urine formed
c. The urine will be more concentrated

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- d. The urine will be more dilute
15. Which is the wall of the small intestine bears crypts between the base of villi?
 - a) Peyer's patches
 - b) Crypts of Leiberkuhn
 - c) Vermiform appendix
 - d) Haustra
 16. The nymph grows by ___ or ecdysis about 13 times to reach the adult form.
 - a) Moulting
 - b) Allergen
 - c) Diploptera punctata
 - d) Super food
 17. The immune cells attack and inflame the membranes around the joints _____.
 - a) Stickler syndrome
 - b) Rhabdomyosarcoma
 - c) Rheumatoid arthritis
 - d) Sjogrens syndrome
 18. Which does become fatal to the foetus because the child suffers from anaemia and jaundice?
 - a) Rh1
 - b) Rh2
 - c) Erythroblastosis foetalis
 - d) Prothrombin
 19. The thick bundle of elongated nerve roots within the lower vertebral canal is _____.
 - a) Spinal cord
 - b) Caudaequina
 - c) Cervical enlargement
 - d) Lumbar enlargement
 20. Inner to the axolemma, the cytoplasm contains the _____.
 - a) Bipolar neurons
 - b) Unipolar neurons
 - c) Intracellular fluid
 - d) Resting membrane Potential
 21. Science of classification is called as _____.
 - a) Taxonomy
 - b) Classification
 - c) Nomenclature
 - d) Identification
 22. The endothelium of glomerulus has many pores _____.
 - a) Fenestrae
 - b) Simple squamous epithelium
 - c) Podocytes
 - d) Filtration slits
 23. What does HCl produce?
 - a) Acidic medium
 - b) Alkaline medium
 - c) Both of these
 - d) None of the above
 24. Based on the behaviour of the organisms it can be classified.
 - a) Neo taxonomical tool
 - b) Ethology of taxonomical tool
 - c) e - taxonomic resource
 - d) All of the above
 25. Which does maintain the internal osmotic concentration ?
 - a) Osmotic homeostasis
 - b) Osmoregulators
 - c) Stenohaline
 - d) Euryhaline
 26. In which, the oxygenated blood entering the aorta from the left ventricle is carried by a network of arteries, arterioles and capillaries to the tissues?
 - a) Systemic circulation
 - b) Pulmonary circulation
 - c) Vagus nerve
 - d) Hypertension
 27. Located in the midline of the brain, between the two cerebral hemispheres _____.
 - a) Ampulla
 - b) Depolarization
 - c) Proprioception
 - d) Septum pellucidum
 28. Which character is not included in Sponges?
 - a) Aquatic, sessile or free swimming, solitary or colonial forms with radial symmetry
 - b) These pore bearing animals
 - c) They are aquatic, mostly marine, asymmetrical
 - d) a few species live in freshwaters
 29. The region where the diaphysis and epiphyses meet is called the _____.
 - a) Metaphysis
 - b) Periosteum
 - c) Osteoblasts
 - d) Endosteum
 30. ___ help to prevent falls which is a common problem in older adults.
 - a) Myasthenia gravis
 - b) Balance exercises
 - c) Metaphysis
 - d) Muscle pull
 31. Which character is not included in Annelida?
 - a) Has jointed appendages
 - b) The coelom with coelomic fluid creates a hydrostatic skeleton
 - c) Their elongated body is metamerically segmented

- d) Internally the segments are divided from one another, metamerism
32. While fasting, ____ maintains life by producing and supplying energy as fuel.
a) Adipocytes b) Adipose tissue c) Brown fat d) White fat
33. Which is one of the parameter used to identify the efficiency of the kidney?
a) 120-125mL/min b) Renal clearance
c) Tubular reabsorption d) 170-180 L per day
34. Cerebral hemisphere is called as _____.
a) Autonomic Nervous System b) Brain c) Prosencephalon d) Telencephalon
35. An earthworm is divided 14th - 17th segments _____ region.
a) Setigerous sac b) Pre clitellar c) Clitellar d) Post - clitellar
36. At the junctional region of the gizzard are eight fingers like _____.
a) Gizzard b) Enteric caecae c) Malpighian tubules d) Hindgut
37. Which are unidirectional flow of blood due to the presence of semilunar valves that prevents backflow of blood?
a) Capillaries b) Veins c) Coronary artery d) Open circulatory system
38. Which is the mucus along with the bicarbonate ions from the pancreas provide?
a) Acidic medium b) Alkaline medium
c) Both of these d) None of the above
39. What is a structural abnormality in which superior part of the stomach?
a) Peptic ulcer b) Appendicitis c) Hiatus hernia d) Diarrhoea
40. Highly specialized nerve and sensory cells coordinate and integrate the functions of the organ systems, which can be very _____ depending on the individual animal.
a) primitive b) simple c) complex d) all of the above
41. Which is maintained the osmotic pressure of the blood?
a) Albumin b) Globulin c) Prothrombin and Fibrinogen d) All of the above
42. Name the protein found in the middle layer of blood vessel.
a) Lymphocytes b) Tunica intima c) Elastin d) Tunica externa
43. _____ is situated at the upper end of the ulna which forms the pointed portion of the elbow.
a) Humerus b) Glenoid cavity c) Olecranon process d) Pelvic girdle
44. Frog is an _____.
a) Rana hexadactyla b) Amphibian c) Anura d) Poikilothermic
45. _____ store the sperms in the form of bundles called spermatophores.
a) Malpighian tubules b) Mushroom shaped gland
c) Seminal vesicles d) Gonapophyses
46. Assertion: The imbalance in concentration of Na^+ , K^+ and proteins generates action potential. Reason: To maintain the unequal distribution of Na^+ and K^+ , the neurons use electrical energy.
a. Both Assertion and Reason are true and Reason is the correct explanation of the Assertion.
b. Both Assertion and Reason are true but the Reason is not the correct explanations of Assertion.
c. Assertion is true, but Reason is false.
d. Both Assertion and Reason are false
47. _____ involves transfer of healthy kidney from one person (donor) to another person with kidney failure.
a) Haemodialysis b) Kidney transplantation
c) Joseph E d) Atrial natriuretic peptide
48. The conditioned reflex was first demonstrated by _____.
a) Unconditional reflex b) Conditioned reflex
c) Pavlov d) Cerebral cortex
49. The _____ is located between the diencephalon and the pons.

- a) Emotional brain b) Brain stem c) Mid brain d) Corpora quadrigemina
50. _____ introduced the method of representing evolutionary relationships with the help of a tree diagram known as cladogram.
a) Theophrastus b) John Ray c) Carolus Linnaeus d) Ernst Haeckel
51. _____ is a liquid manure or plant tonic obtained from earthworm.
a) Vermitech b) Vermiculture c) Vermicomposting d) Vermiwash
52. Where does trachea divide into right and left primary bronchi, one bronchus to each lung?
a) 4th thoracic vertebra b) 5th thoracic vertebra
c) Mediastinum d) All of the above
53. Which is transported in a dissolved form in the plasma?
a) Dissolved in plasma b) Bound to haemoglobin c) Both of these d) None of the above
54. Which is duct of sub-maxillary/sub-mandibular gland?
a) Taenia coli b) Valves of kerkring
c) Whartons duct d) Succus entericus
55. How does we get energy?
a) 50% energy from carbohydrates b) 35% from fats
c) 15% from proteins d) All of the above
56. Who was defined the term bio-diversity?
a) A.G. Tansley b) Walter Rosen c) E.D. Wilson d) Aristotle
57. _____ have high myosin ATPase activity and can make large amounts of ATP.
a) Slow - oxidative fibres b) Fast - oxidative fibres
c) Fast - glycolytic fibres d) Hydrostatic skeleton
58. Earth has _____ habitats with a wide range of living organisms inhabiting them.
a) few b) numerous c) all d) none of these
59. Study all the living organism hence it becomes necessary to devise some means and methods to make this possible and this process is called _____.
a) taxonomy b) classification c) nomenclature d) identification
60. A body cavity called the _____ is seen between the alimentary canal and the body wall.
a) Microchaetus rappi b) Drawida nilamburansis
c) Coelom d) Coelomocytes
61. _____ have a single short process and one axon.
a) Bipolar neurons b) Unipolar neurons
c) Intracellular fluid d) Resting membrane Potential
62. The limbless amphibian is
a) Ichthyophis b) Hyla c) Rana d) Salamander
63. Vascular layer of eye is _____.
a) Aqueous humor b) Crystalline c) Sclera d) Choroid
64. What is the dental formula in dog?
a) 2033/1023 b) 0033/3133 c) 3142/3143 d) 2123/2123
65. Ecosystem is a community of living organisms non-living environment and their interrelationships. It relates with
a) A.G. Tansley b) Walter Rosen c) E.D. Wilson d) Aristotle
66. The prostate gland serves to cement the spermatozoa into bundles _____.
a) Spermatophores b) Cocoons c) 2 - 3 weeks d) Direct
67. Non-shivering thermogenesis in neonates produces heat through
a) White fat b) Brown fat c) Yellow fat d) Colourless fat
68. Which is not found in organ level of organization?
a) The evolution of mesoderm in these animals has led to their structural complexity
b) The tissues are organised to form organs and organ systems
c) Different types of cells are functionally isolated
d) Each system is associated with a specific function and show organ system level of organisation

69. Name the crypts between the base of villi in the wall of the small intestine?
 a) Ampulla of Vater b) Bartholin's duct
 c) Crypts of Lieberkuhn d) Falciiform ligament
70. The hemispheres are connected by a tract of nerve fibres called _____.
 a) Cerebrum b) Cerebral cortex
 c) Corpus callosum d) Association areas
71. Absorption of glycerol, fatty acids and monoglycerides takes place by
 a) Lymph vessels within villi b) Walls of stomach
 c) Colon d) Capillaries within villi
72. *Rana hexadactyla* is placed in the order .
 a) *Rana hexadactyla* b) Amphibian c) Anura d) Poikilothermic
73. Which character is not included in Arthropoda?
 a) Some are monoecious (earthworms) while some are dioecious
 b) The body consists of a head, thorax, and abdomen with haemocoel
 c) Respiratory organs are gills, book gills, book lungs or trachea
 d) Circulatory system is of open type
74. Trinomen means,
 a) Generic name b) Species name
 c) Sub-species name d) All of the above
75. The glomerular filtration which is a _____.
 a) Passive process b) 180l c) Glomerular pressure d) Ultrafiltration
76. ___ is used for storing food.
 a) Gynovalvular plates b) Foregut c) Crop d) Proventriculus
77. An accessory ___ at the base of each antenna which also pumps blood.
 a) Haemocytes b) 13 chambers c) Alary muscles d) Pulsatile vesicle
78. It appears for the first time in the Phylum Platyhelminthes and seen in other higher phyla.
 a) Acellular level of Organisation b) Cellular level of Organisation
 c) Tissue level of Organisation d) Organ level of Organisation
79. The ___ is more significant in the molecular taxonomical tools.
 a) Accuracy and b) Authenticity
 c) Both of these d) None of the above
80. The respiratory centre is present in the
 a. Medulla oblongata b. Hypothalamus c. Cerebellum d. Thalamus
81. The loss of electric potential difference between the inside and outside _____.
 a) Ampulla b) Depolarization c) Proprioception d) Septum pellucidum
82. ___ lies in front of the cerebellum between the midbrain and the medulla oblongata.
 a) Rhombencephalon b) Cerebellum
 c) Pons varoli d) Medulla oblongata
83. ___ have many processes with one axon and two or more dendrites.
 a) Myelin sheath b) Synaptic knob
 c) Neuro-muscular junction d) Multipolar neurons
84. To sustain themselves, earthworms must guide their way through the soil using their powerful muscles. They gather nutrients by ingesting organic matter and soil, absorbing what they need into their bodies. True or False: The two ends of the earthworm can equally ingest soil.
 a. True b. False
85. The sclerites on the ventral side are called _____.
 a) Sclerites b) Tergites c) Sternites d) Pleurites
86. The world's first successful human kidney transplantation was performed from one twin to another by _____.
 a) Haemodialysis b) Kidney transplantation
 c) Joseph E d) Atrial natriuretic peptide

- c) Columnar epithelium d) Cuboidal epithelium
104. ____ is also called Brights disease and is characterized by inflammation of the glomeruli of both kidneys.
a) Uremia b) Renal calculi
c) Pyleothotomy or lithotripsy d) Glomerulonephritis
105. ____ may be different for the study of plants and animals.
a) Tools b) Taxonomical aids
c) Both of these d) None of the above
106. What is the mechanism of small amounts of glucose, amino acids and electrolytes like chloride ions are generally absorbed?
a) Diffusion b) Simple diffusion c) Facilitated transport d) Active transport
107. Each ovary is formed of a group of eight ovarian tubules or ____.
a) Ovarioles b) Vagina c) Ootheca d) Paurometabolus
108. Which are chords that extend from the edge of each flap?
a) Aorta b) Chordate tendineae c) Lub sound d) Dub sound
109. Acetabulum is located in
a. collar bone b. hip bone c. shoulder bone d. thigh bone
110. Assertion : (A) Large intestine also shows the presence of villi like small intestine.
Reason: (B) 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
111. Which is the first step in urine formation is the filtration of blood that takes place in the glomerulus?
a) Vasa recta b) Cortical nephrons
c) Ornithine cycle d) Glomerular filtration
112. Which character is not included in Arthropoda?
a) This is the largest phylum of the Kingdom Animalia
b) This is the second largest animal phylum
c) Sensory organs like antennae, eyes, statocysts are present
d) Excretion takes place through malpighian tubules, green glands, coxal glands
113. Who was introduced the term bio - diversity?
a) A.G. Tansley b) Walter Rosen c) E.D. Wilson d) Aristotle
114. Pneumatic bones are seen in
a) Mammalia b) Aves c) Reptilia d) Sponges
115. Which is the character not included in class Reptilia?
a) They are mostly terrestrial animals
b) Their body is covered by dry, and cornified skin with epidermal scales or scutes
c) Excretion by metanephric kidneys and are uricotelic
d) Respiration is by gills, lungs and through the skin
116. In sponges, the inner layer is formed of
a) Pinacocytes b) Choanocytes c) Choanoflagellates d) All of the above
117. Make the correct pairs.
Column-I Column-II
(P) IC i. maximum volume of air breathe in after forced.
(Q) EC ii. Volume of air present after expiration in lungs.
(R) VC iii. Volume of air inhaled after expiration.
(S) FRC iv. Volume of air exhaled after inspiration.
(a) P - i , Q - ii , R - iii , S - iv (b) P - ii , Q - iii , R - iv , S - i
(c) P - ii , Q - iii , R - i , S - iv (d) P - iii , Q - iv , R - i , S - ii
118. The external surface of the entire bone except the joint surface is covered by a dou-

- ble-layered membrane called the _____.
- a) Metaphysis b) Periosteum c) Osteoblasts d) Endosteum
119. Which is mucus secreting glands?
a) Gastric rugae b) Glissons capsule c) Goblet cell d) Haustra
120. Warm blooded and maintain a constant body temperature _____.
a) Articular membrane b) Clitellum c) Cochlea d) Homeothermic
121. Mesencephalon includes two large, oval optic lobes and has cavities _____.
a) Olfactory ventricle b) Optic ventricles c) Rhombencephalon d) Cerebellum
122. Sliding filament theory in 1954, _____ proposed the sliding-filament theory to explain muscle contraction.
- a) F-actin
b) Andrew F. Huxley and Rolf Niedergerke
c) Contraction
d) Acetycholine
123. Plasma mainly consists of water
a) 72-80% b) 80- 92% c) 70-80% d) 80-90%
124. The testes give rise to the germ cells or _____.
a) Spermatogonia b) Ciliary rosettes c) Vasa deferentia d) Prostate gland
125. Find odd one out -Biradial symmetry.
a) Symmetry found in cnidarians such as sea anemone and corals
b) Animals which possess two pairs of symmetrical sides
c) It is a combination of radial and bilateral symmetry
d) There are only two planes of symmetry, one through the longitudinal and sagittal axis and the other through the latitudinal and transverse axis.
126. _____ are photosynthetic blue green algae which produce oxygen.
a) Probiotic b) Pathogenic c) Cyanobacteria d) All of the above
127. Which is a sensory structure that responds to a specific stimulus?
a) Sensory Receptor b) Sensory Neuron
c) Interneurons d) Motor Neuron
128. How is respiration found in amphibians, reptiles, birds and mammals?
a) Moist skin b) Tracheal tubes c) Gills d) Vascularized lungs
129. The cells are accumulated with the pro-teins called _____.
a) Aqueous humor b) Crystalline c) Sclera d) Choroid
130. Which is the character of class Osteichthyes?
a) Air bladder is present with or without a connection to the gut
b) Excretory organs are mesonephric kidneys and are ammonotelic
c) Sexes are separate, external fertilization is seen and most forms are oviparous
d) All of the above
131. The covering around each fascicle is the _____.
a) Epimysium b) Perimysium c) Endomysium d) Sarcolemma
132. What does mouth lead?
a) Buccal cavity b) Oral cavity c) Both of these d) None of the above
133. Which is antibacterial agent?
a) Lysozyme b) Lysosome c) Glycoprotein d) All of the above
134. The affected person can see the nearby ob-jects _____.
a) Fovea centralis b) Blind spot c) Myopia d) Hypermetropia
135. Which is required for growth and repair of body cells?
a) Carbohydrate b) Protein c) Lipid d) Vitamin
136. Which is produced during amino acid breakdown is toxic?
a) Excretory system b) Ammonia c) Ammonoteles d) Uricoteles
137. The cells of a tissue integrate in a highly coordinated fashion to perform a common function, due to the presence of nerve cells and sensory cells.

- a) Acellular level Organisation b) Cellular level Organisation
c) Tissue level Organisation d) Organ level Organisation
138. Which is the character of class Osteichthyes?
a) Skin is covered by ganoid, cycloid or ctenoid scales
b) Helps in gaseous exchange and for maintaining buoyancy
c) A ventrally placed two chambered heart
d) All of the above
139. Which is a parameter that reflects the amount of solute passing from the plasma to the urine in a given period of time?
a) 120-125mL/min b) Renal clearance
c) Tubular reabsorption d) 170-180 L per day
140. Jointed appendages in Arthropoda which are used for
a) locomotion b) feeding c) sensory d) all of the above
141. What is the layer of parasympathetic nerve fibres which controls peristalsis?
a) Serosa b) Muscularis c) Submucosa d) Mucosa
142. What is the technical term to mineral salts like calcium and magnesium deposited and form a hard layer on the teeth?
a) Tartar b) Calculus c) Both of these d) None of these
143. Which is the lack of myoglobin gives pale colour to the fibres?
a) Red muscle fibres b) Glycolytic fibres
c) White muscle fibres d) Cartilage
144. The juveniles undergo changes into ___ forms in phase - I after about 15 days.
a) Juveniles b) Non-clitellate c) Clitellate d) 60 days
145. Later on biologists initiated studies on the evolutionary and genetic relationships among organisms, which led to the emerge of phylogenetic classification or ____.
a) Cladistics b) Tree diagram c) Cladogram d) All of the above
146. The presence of a large number of species in a particular ecosystem is called
a) producer b) bio diversity c) consumer d) decomposer
147. Which is major source of cellular fuel?
a) Carbohydrate b) Protein c) Lipid d) Vitamin
148. Which is due to lack of oxygen supply to the heart muscles?
a) Myocardial infarction b) Ischemic heart disease
c) Rheumatic fever d) CPR
149. ___ is permeable to water, secretes K^+ and reabsorbs Na^+ to produce concentrated urine.
a) 1.5 L per day b) Selective reabsorption c) Collecting duct d) Aquaporins
150. Due to aging, the lens loses elasticity and the power of accommodation ____.
a) Erythropsin b) Chloropsin c) Presbyopia d) Astigmatism
151. ___ revised the six kingdom system to Seven Kingdom system.
a) R.H. Whittaker b) Carl Woese c) Cavalier-Smith d) All of the above
152. The type of vision in Cockroach is
a) Three dimensional b) Two dimensional
c) Mosaic d) Cockroach do not have vision
153. Naming of organisms is called ____.
a) Taxonomy b) Systematics c) Both of these d) None of these
154. Each H-zone is bisected vertically by a dark line called the ____.
a) Isotropic bands b) H-Zone c) M-line d) Z-disc
155. The abundant intracellular cation is
a. H^+ b. K^+ c. Na^+ d. Ca^{++}
156. The change in permeability to water is due to the presence of number of water-permeable channels called ____.

157. a) 1.5 L per day b) Selective reabsorption c) Collecting duct d) Aquaporins
There is division of labour among the cells in sponges and _____ types of cells are functionally isolated.
158. a) same b) different c) all d) All of the above
Which is obtained when percentage saturation of haemoglobin with oxygen plotted against pO₂ ?
159. a) Oxygen Haemoglobin Association Curve
b) Oxygen Haemoglobin Dissociation Curve
c) Both of these d) None of the above
The distal convoluted tubule (DCT) of many nephrons open into a straight tube called _____.
160. a) Distal convoluted tubule b) Collecting duct
c) Juxtamedullary nephrons d) Glomerulus
The heart consists of _____ with ostia on either side.
161. a) Haemocytes b) 13 chambers c) Alary muscles d) Pulsatile vesicle
Find odd one out - Diploblastic animals.
162. a) Animals in which the cells are arranged in two embryonic layers, the external ectoderm, and internal endoderm
b) In these animals the ectoderm gives rise to the epidermis
c) They consist of middle mesoderm
d) An undifferentiated layer present between the ectoderm and endoderm is the mesoglea.
Which is the process of maintenance of constant internal environment?
163. a) Homostasis b) Homeostasis c) Heterostasis d) All of the above
Find odd one out - Endoderm.
164. a) Gut b) Teeth c) Lung d) Liver
Which is the total volume of air a person can exhale after normal inspiration?
165. a) Vital capacity (VC) b) Inspiratory capacity (IC)
c) Expiratory capacity (EC) d) Total Lung Capacity (TLC)
A pair of are situated latero-ventrally in the 18th segment.
166. a) Dorsal pores b) Coelomic fluid
c) Female genital aperture d) Male genital apertures
What is the name of inflammation of the inner lining of colon?
167. a) Colimyelitis b) Colitis c) Both of these d) None of the above
The region between two successive Z-discs is called a
168. a. sarcomere b. microtubule c. myoglobin d. actin
Which is a small upward wave and indicates the depolarisation of the atria?
169. a) Electrocardiogram b) Sinu Auricular node c) P wave d) T wave
The outer thick layer of cranial cavity is _____.
170. a) Duramater b) Arachnoid mater c) Piamater d) Subarachnoid space
_____ are helpful in removal of the excretory products from the haemolymph.
171. a) Gizzard b) Enteric caecae c) Malpighian tubules d) Hindgut
Cultivation of earthworms for the betterment of human beings _____.
172. a) Vermitech b) Vermiculture c) Vermicomposting d) Vermiwash
It is the top most of the taxonomic hierarchy.
173. a) Order b) Class c) Phylum d) Kingdom
Mention the range of the mucus along with the bicarbonate ions from the pancreas provides an alkaline medium for the enzymatic action.
174. a) pH 1.8 b) pH 5.4-7.4 c) pH 7.8 d) pH 7.0
Identify the wrong match
- a. Bowmans capsule - Glomerular filtration
b. DCT - Absorption of glucose

- c. Henles loop - Concentration of urine
d. PCT - Absorption of Na⁺ and K⁺ ions
175. Which of the following is not correctly paired?
a) Humans - Ureotelic b) Birds - Uricotelic
c) Lizards - Uricotelic d) Whale - Ammonotelic
176. The ___ is a curved bar of bone.
a) Ischium b) Acetabulum c) Tarsus d) Metatarsus
177. A fused mouthpart which forms the floor of the mouth of an insect _____.
a) Articular membrane b) Clitellum c) Cochlea d) Labium
178. _____ have true nucleus and membrane bound organelles.
a) Archaea b) Bacteria c) Eukarya d) All of these
179. What is the fluid inside the lymphatics?
a) Serum b) Heparin c) Lymph d) Lymph nodes
180. The ___ run upto the 18th segment.
a) Spermatogonia b) Ciliary rosettes c) Vasa deferentia d) Prostate gland
181. ___ include cartilage, bone and blood.
a) Specialized connective tissues b) Areolar connective tissue
c) Tissue fluid d) Adipose tissue
182. ___ is actually a muscle tear.
a) Atrophy b) Muscle pull c) Arthritis d) Osteoarthritis
183. Which walls are guarded by semilunar valves?
a) Capillaries b) Veins c) Coronary artery d) Open circulatory system
184. Internal bone surfaces are covered with a delicate connective tissue membrane called the _____.
a) Metaphysis b) Periosteum c) Osteoblasts d) Endosteum
185. If the columnar cells bear cilia on their free surfaces _____.
a) Microvilli b) Goblet cell
c) Ciliated epithelium d) Nonciliated epithelium type
186. Which character is not included in Cnidarians?
a) The polyp forms are sessile and cylindrical
b) The medusa are umbrella shaped and free swimming
c) Reproduce asexually by fragmentation or gemmule formation and sexually by the formation of gametes
d) Exhibit alternation of generations in their life cycle (Metagenesis)
187. How many abdominal segments are present in male and female Cockroaches? a) 10, 10
b) 9, 10 c) 8, 10 d) 9, 9
188. Which is a life saving procedure that is done at the time of emergency conditions such as when a person's breath?
a) Myocardial infarction b) Ischemic heart disease
c) Rheumatic fever d) CPR
189. Which is lubricating agent of mucus?
a) Lysozyme b) Lysosome c) Glycoprotein d) All of the above
190. Which are usually lie deep inside the body?
a) Arteries b) KiloPascal (KPa) c) Small sphincter d) Anastomoses
191. Find odd one out - Aves.
a) Turtle b) Tortoise c) Viper d) Vulture
192. The pointed portion of the elbow is
a. acromion process b. glenoid cavity
c. olecranon process d. symphysis
193. Which is associated with the closure of the AV valves?
a) Aorta b) Chordate tendineae c) Lub sound d) Dub sound

194. Which character is not included in Cnidarians?
 a) Exhibit two basic body forms, polyp and medusa
 b) They are hermaphrodites
 c) The first group of animals to exhibit tissue level organisation and are diploblastic
 d) Serves the process of ingestion and egestion
195. Hypothalamus also acts as the _____.
 a) Hypothalamus
 b) Infundibulum
 c) Mammillary bodies
 d) Satiety centre
196. ____helpful for the landing of the frog after leaping.
 a) Nictitating membrane
 b) Tympanic membranes
 c) Cloacal aperture
 d) Fore limbs
197. Ovarian funnels are present beneath the ovaries which continue into the _____.
 a) 20 segments
 b) Regenerate
 c) Oviducts
 d) Spermathecae
198. Which is a parasympathetic nerve that supplies the atrium especially the SA and the AV nodes?
 a) Systemic circulation
 b) Pulmonary circulation
 c) Vagus nerve
 d) Hypertension
199. 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.
200. The ____ of connective tissue provides support.
 a) Connective tissues
 b) Fibres
 c) Loose connective tissues
 d) Dense connective tissues
201. The action potential occurs in response to a threshold stimulus but does not occur at subthreshold stimuli is called _____.
 a) Sodium-Potassium pump
 b) Depolarization
 c) Threshold potential
 d) All or none principle
202. Which is a nucleotide molecule consisting of adenine, ribose and three phosphate molecules?
 a) Adenosine triphosphate
 b) Neuromuscular junction
 c) Skeletal Muscle Glycogen Analysis
 d) 5000 glucose units
203. The RBCs are devoid of _____.
 a) Nucleus and mitochondria
 b) Ribosomes and endoplasmic reticulum
 c) Both of these
 d) None of the above
204. ____are large, long and consist of thigh, shank and foot.
 a) Hind limbs
 b) Vocal sacs
 c) Nuptial pad
 d) Muscular sticky tongue
205. Which is the character included in class Aves?
 a) Sexes are separate with well marked sexual dimorphism
 b) In males, the testes are paired but in females, only the left ovary is well developed while the right ovary is atrophied
 c) Eggs are megalecithal and cleidoic
 d) All of the above
206. In which of the following organisms, self fertilization is seen.
 a) Fish
 b) Round worm
 c) Earthworm
 d) Liver fluke
207. What is the weight of adult heart?
 a) Raymond de viessens
 b) Cardiac muscle
 c) Papillary muscles
 d)
208. Linear chromosome with histone proteins, ribosomes of _____type is found in the chloroplast and mitochondria.
 a) 70S
 b) 80S
 c) Both of these
 d) None of the above

209. Which is the reduction in platelet number can lead to clotting disorders that result in excessive loss of blood from the body?
a) Agranulocytes b) Lymphocyte c) Monocytes d) Platelets
210. Which means a brief electric shock is given to the heart to recover the function of the heart?
a) William Harvey b) James Elam and Peter Safarc) CPR d) Defibrillation
211. The bone cells (osteocytes) are present in the spaces called____.
a) Bone b) Lacunae c) Blood d) Ehlers -Danlos syndrome
212. Development is____and no larva is formed during development.
a) Spermatophores b) Cocoons c) 2 - 3 weeks d) Direct
213. ____membrane protects the eye when the frog is under water.
a) Nictitating membrane b) Tympanic membranes
c) Cloacal aperture d) Fore limbs
214. What type of fibres are found in connective tissue matrix?
a) Collagen b) Areolar c) Cartilage d) Tubular
215. ____transmits nervous impulses from the spinal cord to effectors.
a) Lever system b) Motor neuron
c) Fibrous joints or Synarthroses d) Cartilaginous joints or Amphiarthroses
216. Reproductive organs of frog on the dorsal body wall of peritoneum called____.
a) Mesovarium b) Testis c) Ovisacs d) Tadpole
217. After about____, each cocoon produces baby earthworms.
a) Spermatophores b) Cocoons c) 2 - 3 weeks d) Direct
218. First step in digestion of fat is
a) Emulsification b) Enzyme action
c) Absorption by lacteals d) Storage in adipose tissue
219. ____allows recoil of tissues following stretching.
a) Elastic connective tissue b) Specialised connective tissues
c) Cartilages d) Bones
220. ____is the synovial membranes become inflamed and there is an accumulation of fluid in the joints.
a) Rheumatoid arthritis b) Gouty arthritis or gout
c) Osteoporosis d) Endurance
221. Which are less numerous than any other type of WBCs constituting 0.5%- 1.0% of the total number of leucocytes?
a) Granulocyte b) Neutrophils c) Eosinophils d) Basophils
222. Mention the reason of incomplete digestion is found in Platyhelminthes.
a) Single opening to the exterior which serves as both mouth and anus
b) Two openings to the exterior which serve as both mouth and anus
c) Both of these
d) None of these
223. Which does hydrolyse peptide bonds associated with specific amino acids?
a) Trypsin b) Chymotrypsin c) Chymotrypsinogen d) Enterokinase
224. The part of cortex that extends in between the medullary pyramids is the____.
a) Medullary pyramids b) Renal columns of Bertini
c) Renal hilum d) Renal corpuscle
225. Ecosystem means
a) a community of living organisms b) non-living environment
c) their interrelationships d) All of the above
226. ____is a large opening found at the posterior base of the skull.
a) Hyoid bone b) Foramen magnum c) Atlas d) Sternum

227. A group of organisms having similar traits of a rank is
a) Species b) Taxon c) Genus d) Family
228. What is the name of duct of sublingual gland?
a) Ampulla of vater b) Bartholins duct
c) Crypts of leiberkuhn d) Falciform ligament
229. Which is a character of Hemichordata?
a) Excretion is by a single proboscis gland or glomerulus situated in the proboscis
b) Nervous system is primitive
c) Sexes are separate and sexual reproduction with a free swimming tornaria larva
d) All of the above
230. Enterocoelomate animals.
a) The body cavity is formed from the mesodermal pouches of archenteron
b) Echinoderms, hemichordates and chordates
c) Both of these
d) None of the above
231. Find odd one out - Viviparous
a) Platypus b) Kangaroo c) Pigeon d) Parrot
232. How does call breakdown of the food into micromolecules?
a) Ingestion b) Digestion c) Absorption d) Assimilation
233. The key character of living organisms is
a) adaptation b) homeostasis c) Both of these d) None of the above
234. Schizocoelomates relates with
a) In these animals the body cavity is formed by splitting of mesoderm
b) Annelids, arthropods, molluscs
c) Both of these
d) None of the above
235. Which is the primary function of the respiratory system?
a) To maintain the vocal cords for normal communication (vocalization)
b) To remove the heat produced during cellular respiration through breathing
c) Both of these
d) None of the above
236. In both sexes, genital apertures are surrounded by sclerites called ____.
a) Genital pouch b) Gonapophysis c) Anal styles d) Anal cerci
237. These are flagellated collar cells that create and maintain water flow through The sponge thus facilitating respiratory and digestive functions.
a) Pinacocytes b) Choanocytes c) Chaoanoflagellates d) All of the above
238. In water, skin acts as aquatic respiratory organ ____.
a) Cutaneous respiration b) Diffusion
c) Buccal respiration d) Pulmonary respiration
239. Which is symptom of Marasmus?
a) An acute form of protein malnutrition
b) Due to a diet with inadequate carbohydrate and protein
c) Suffer from diarrhoea
d) All of the above
240. The development of cockroach is gradual through ____.
a) Ovarioles b) Vagina c) Ootheca d) Paurometabolus
241. ____ was the first to classify all animals in his History of Animals.
a) Carolus Linnaeus b) Aristotle
c) Augustin Pyramus de Candole d) Charles Darwin
242. ____ acting on the afferent glomerular arterioles as a vasodilator or on efferent arterioles as a vasoconstrictor.
a) Counter current multiplier b) Atrial Natriuretic Peptide or factor

- c) Micturition d) 1 to 1.5L
243. Which is the character not included in Vertebrata?
- a) They possess notochord during embryonic stage
 b) Possess paired appendages such as fins or limbs
 c) Alimentary canal is complete and circulatory system is of open type
 d) Skin is covered by protective skeleton comprising of scales, feathers, hairs, claws, nails
244. There are 12 pairs of ____.
- a) Cranial nerves b) Spinal nerves
 c) Somatic neural system d) Autonomic neural system
245. ____ is light touch receptor lying in the deeper layer of epidermis.
- a) Tactile merkel disc b) Hair follicle receptors
 c) Meissners corpuscles d) Pacinian corpuscles
246. The ability of the eyes to focus objects at varying distances is called ____.
- a) Retina b) Canal of schlemm c) Ciliary muscle d)
- Accommodation**
247. ____ involves movement of the filtrate back into the circulation.
- a) 120-125mL/min b) Renal clearance
 c) Tubular reabsorption d) 170-180 L per day
248. The scala media and scala tympani are sep-arated by a membrane called ____.
- a) Perilymph b) Basilar membrane c) Organ of corti d) Stereocilia
249. What is meant by Protostomia?
- a) Anus is formed from or near the blastopore
 b) The mouth is formed away from the blastopore
 c) It includes only one subdivision Enterocoelomata
 d) The embryonic blastopore develops into mouth
250. Trinomial Nomenclature was proposed by
- a) Huxley and Stricklandt b) Carolus Linnaeus
 c) Charles Darwin d) Aristotle
251. What type of pressure occur while increasing pressure in lungs during inspiration?
- a) Interpulmonary pressure b) Intrapulmonary pressure
 c) Both of these d) None of the above
252. Which meshwork after sometime fibrin fibrils contract, squeezing out a strawcoloured fluid?
- a) Serum b) Heparin c) Lymph d) Lymph nodes
253. Which characters may found in Metamerism?
- a) The body is externally and internally divided into a series of repeated units called segments with a serial repetition of some organs
 b) Animals which possess notochord at any stage of their development
 c) The segments may look different and has different functions
 d) All of the above
254. Just behind the choroid plexus, the epi-thalamus forms a short stalk which ends in a rounded body called ____.
- a) Epithalamus b) Choroid plexus c) Pineal body d) Melatonin
255. Which does occur when the arteries are lined by atheroma?
- a) Coronary heart disease b) Atherosclerosis c) Thrombus d) Stroke
256. All living organisms can be classified into different taxa is called ____.
- a) Taxonomy b) Classification c) Nomenclature d) Identification
257. In adults the GFR is approximately ____.
- a) 120-125mL/min b) Renal clearance
 c) Tubular reabsorption d) 170-180 L per day

258. Which is the inner layer of heart wall?
a) Epicardium b) Myocardium c) Endocardium d) Pericardial space
259. ____ is called white fat.
a) Adipocytes b) Adipose tissue c) Brown fat d) White fat
260. Which is a character of Hemichordata?
a) This phylum consists of a small group of wormlike, acorn worms
b) They are bilaterally symmetrical, triploblastic and coelomate animals
c) Their body is cylindrical and is divided into proboscis, collar and a long trunk
d) All of the above
261. Arranging organisms on the basis of their similar or derived characters which differ from the ancestral characters produced in _____.
a) Cladistics b) Cladogram c) Both of these d) None of the above
262. ____ have ciliated cells, Metanephridia are the tubular excretory structures in annelids and molluscs.
a) Flame cells b) Solenocytes c) Nematodes d) Insects
263. ____ a roof like structure overhanging the organ of Corti throughout its length.
a) Tectorial membrane b) 20 times c) Perilymph d) Conductive deafness
264. ____ lines the small bronchioles, fallopian tubes and uterus.
a) Microvilli b) Goblet cell
c) Ciliated epithelium d) Nonciliated epithelium type
265. Where is nucleus large sized and constricted into several lobes but not joined by delicate threads?
a) Granulocyte b) Neutrophils c) Eosinophils d) Basophils
266. Which part of the human brain is concerned with the regulation of body temperature?
a. Cerebellum b. Cerebrum c. Medulla oblongata d. Hypothalamus
267. Exoskeleton has hardened plates called _____.
a) Sclerites b) Tergites c) Sternites d) Pleurites
268. Fat has a caloric value
a) 4.1 b) 9.45 c) 5.65 d) 9.1
269. Which of the following WBCs are found in more numbers?
a) Eosinophil b) Neutrophil c) Basophil d) Monocyte
270. Which of the central nervous system are the microglia, in the sinusoids of the liver they are called Kupffer cells?
a) Agranulocytes b) Lymphocyte c) Macrophages d) Platelets
271. ____ forms the dry epidermis of the skin.
a) Exocrine glands b) Endocrine glands
c) Compound epithelium d) Keratinized squamous epithelium type
272. Which individuals carry the antigen D on the surface of the red blood cells?
a) Rh1 b) Rh2 c) Erythroblastosis foetalis d) Prothrombin
273. Scientists think Cockroach milk could be the ____ of the future.
a) Moulting b) Allergen c) Diptera punctata d) Super food
274. An axon is a long fibre that arises from a cone shaped area of the cell body called _____.
a) Neurilemma b) Dendrites c) Nissl's granules d) Axon hillock
275. Which character is not included in Arthropoda?
a) They are mostly dioecious and oviparous; fertilization is usually internal
b) Development may be direct or indirect
c) A soft layer of skin forms a mantle over the visceral hump
d) Life history includes many larval stages followed by metamorphosis
276. The skeleton of the arm, the region between the shoulder and elbow is the _____.
a) Humerus b) Glenoid cavity c) Olecranon process d) Pelvic girdle
277. Plate-like cells that maintain the size and structure of the sponge is

- a) Pinacocytes b) Choanocytes c) Chaoanoflagellates d) All of the above
278. Which is the amount of blood pumped out by each ventricle per minute ?
 a) Ventricular diastole b) Cardiac output
 c) Systolic pressure d) Diastolic pressure
279. _____ is an examination of tissue or liquid removed from a living body.
 a) Biopsy b) Autopsy c) Skeletal muscle tissue d) Smooth muscle
280. Match the following human spinal nerves in column I with their respective number in column II and choose the correct option
- | COLUMN I | COLUMN II |
|--------------------|--------------|
| P. Cervical nerves | i. 5 pairs |
| Q. Thoracic nerve | ii. 1 pair |
| R. Lumbar nerve | iii. 12 pair |
| S. Coccygeal nerve | iv. 8 pair |
- a. (P-iv), (Q-iii), (R-i), (S-ii)
 b. (P-iii), (Q-i), (R-ii), (S-iv)
 c. (P-iv), (Q-i), (R-ii), (S-iii)
 d. (P-ii), (Q-iv), (R-i), (S-iii)
281. Name the folds in wall of stomach.
 a) Gastric rugae b) Glissons capsule c) Goblet cell d) Haustra
282. The external visceral layer is made of epithelial cells called _____.
 a) Fenestrae b) Simple squamous epithelium
 c) Podocytes d) Filtration slits
283. Which is a character of pseudocoelom?
 a) Animals which do not possess a body cavity
 b) Their body is solid without a perivisceral cavity
 c) Restricts the free movement of internal organs
 d) Acts as a hydrostatic skeleton and allows free movement of the visceral organs and for circulation of nutrients
284. The blood flowing into the capillary from an arteriole has a high _____ pressure.
 a) Homostatic b) Hydrostatic c) Homeostatic d) All of the above
285. _____ present in the tip of nose, outer ear, ear pinna, vertebral column, limbs.
 a) Elastic connective tissue b) Specialised connective tissues
 c) Cartilages d) Bones
286. Acts as a reservoir of water and salts for body tissues, hence aptly called _____.
 a) Specialized connective tissues b) Areolar connective tissue
 c) Tissue fluid d) Adipose tissue
287. _____ appears to be multi-layered because the nuclei lie at different levels.
 a) Pseudo-stratified epithelial b) Glandular epithelium
 c) Goblet cells d) Salivary gland
288. In _____ is the length of the muscle does not change but the tension of the muscle changes.
 a) Isotonic contraction b) Isometric contraction
 c) Myosin d) Oxidative fibres
289. Harmful Bacteria is called _____.
 a) Probiotic b) Pathogenic c) Cyanobacteria d) All of the above
290. From Aschelminthes to Chordates, all animals have a complete digestive system with
 a) Single opening to the exterior which serves as both mouth and anus
 b) Two openings to the exterior which serve as both mouth and anus
 c) Both of these

- d) None of these
291. ___ are used in flight.
a) Metathorax b) Tergum c) Sternum d) Boat
292. A small depression present in the centre of the yellow spot is called ____.
a) Fovea centralis b) Blind spot c) Myopia d) Hypermetropia
293. The light I-bands also have a darker mid line area called the ____.
a) Isotropic bands b) H-Zone c) M-line d) Z-disc
294. The ___ segment is the largest.
a) Hypognathous b) Orthopterus c) Hypopharynx d) Prothoracic
295. The anterior part of epithalamus is vascular ____.
a) Epithalamus b) Choroid plexus c) Pineal body d) Melatonin
296. Which of the plasma of A, B and O individuals have?
a) Surface antigens b) Natural antibodies
c) Agglutinogens d) Glycosyltransferase
297. The respiratory structures of insects are
a. tracheal tubes b. gills c. green glands d. lungs
298. How is respiration found in arthropods and molluscs?
a) Moist skin b) Tracheal tubes c) Gills d) Vascularized lungs
299. The first neuron involved in the synapse forms the ____.
a) Pre-synaptic neuron b) Cleft
c) Exocytosis d) Brain
300. Find odd one out.
a) Ostrich b) Emu c) Penguin d) Pigeon
301. In sponges, the outer layer is formed of
a) Pinacocytes b) Choanocytes c) Chaoanoflagellates d) All of the above
302. Which of the central nervous system are the microgliain the pulmonary region they are the alveolarmacrophages?
a) Agranulocytes b) Lymphocyte c) Macrophages d) Platelets
303. Protruding from the apical part of each hair cell is hair like structures ____.
a) Perilymph b) Basilar membrane c) Organ of corti d) Stereocilia
304. Metameric segmentation is the main feature of
a) Annelida b) Echinodermata c) Arthropoda d) Coelenterata
305. ___ maintains the pulsatile flow of blood through the arteries.
a) Elastic connective tissue b) Specialised connective tissues
c) Cartilages d) Bones
306. ___ perform cementing to keep neighbouring cells together.
a) Tight junctions b) Adhering junctions
c) Gap junctions d) Connective tissue
307. ___ is composed of a single layer of cells.
a) Simple epithelium b) Squamous epithelium
c) Columnar epithelium d) Cuboidal epithelium
308. There are some exceptional animals which can produce sterile offspring because of mating with closely related.
a) Species b) Genus c) Family d) Order
309. Which is the character of Chondrichthyes?
a) Skin is tough covered by dermal placoid scales and the caudal fin is heterocercal
b) Their jaws are very powerful and are predaceous animals
c) Ureotelic and store urea in their blood to maintain osmotic concentration
d) All of the above
310. ___ is nocturnal and during the day it lives in burrows.
a) Frog b) Earthworms c) Epigeics d) Anecics

311. Which is the character not included in Urochordata or Tunicata?
 a) Notochord is present only in the tail region of the larval stage
 b) Dorsal tubular nerve cord is present in the larval stage and a single dorsal ganglion is present in the adults
 c) Retrogressive metamorphosis is seen
 d) Closed type of circulatory system is seen without heart
312. _____ starts from the 7th segment and continues till the last segment.
 a) Hydrostatic skeleton b) Kalin c) Intestine d) Typhlosole
313. Vocal sacs and _____ are absent in the female frogs.
 a) Hind limbs b) Vocal sacs c) Nuptial pad d) Muscular sticky tongue
314. Dissolved oxygen exchanged through the skin by _____.
 a) Cutaneous respiration b) Diffusion
 c) Buccal respiration d) Pulmonary respiration
315. What is the opening of egestion of faeces?
 a) Roughage b) Defaecation c) Both of these d) None of the above
316. _____ absent in the female.
 a) Genital pouch b) Gonapophysis c) Anal styles d) Anal cerci
317. _____ is the basic unit of classification.
 a) Species b) Genus c) Family d) Order
318. Which is an autoimmune disease which occurs 2-4 weeks after throat infection usually a streptococcal infection?
 a) Myocardial infarction b) Ischemic heart disease
 c) Rheumatic fever d) CPR
319. Find odd one out - Amphibia.
 a) Catla b) Hyla c) Rohu d) Exocoetus
320. It is the principal symmetry in
 a) Asymmetrical b) Diploblastic c) Bilateral d) Triploblastic
321. Each muscle is made up of bundles of muscle fibres called _____.
 a) Mesoderm b) Myocytes c) Tendon d) Fascicle
322. Match column I with column II and choose the correct option
 Column I Column II
 (P) Small intestine (i) Largest factory
 (Q) Pancreas (ii) Absorption of glucose
 (R) Liver (iii) Carrying electrolytic solution
 (S) Colon (iv) Digestion and absorption
 a. (P-iv) (Q-iii) (R-i) (S-ii) b. (P-iii) (Q-ii) (R-i) (S-iv)
 c. (P-iv) (Q-iii) (R-i) (S-ii) d. (P-ii) (Q-iv) (R-iii) (S-i)
323. _____ protects the hind wings when at rest, and is called elytra or
 a) Cervicum b) Hexapoda c) Tarsomeres d) Tegmina
324. 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.
325. Each segment is covered by the ventral _____.
 a) Metathorax b) Tergum c) Sternum d) Boat
326. Which is catalysed the attachments of the terminal amino acids are dependent on the gene products of A and B?
 a) Surface antigens b) Natural antibodies c) Agglutinins d) Glycosyltransferase
327. _____ is enclosed in the vertebral column.
 a) Foramen magnum b) Spinal cord c) Cranial d) Spinal
328. Which does infection mainly occur in the lungs and bones?
 a) Asthma b) Emphysema c) Pneumonia d) Tuberculosis
329. _____ is the principal constituent of the thin filament.
 a) Sarcomere b) Actin c) Meromyosin d) G-actin

330. Which is the enzyme acted on trypsinogen?
 a) Enterokinase b) Succentericus c) Both of these d) None of the above
331. Find odd one out.
 a) Procedure b) Environmental adaptations
 c) Interrelationship between species d) Evolutionary history of the species
332. Each kidney weighs an average of _____.
 a) Crustaceans b) Nephron c) Agglomerular kidneys d) 120-170 grams
333. _____ is the fluid connective tissue containing plasma, RBC, WBC and platelets.
 a) Bone b) Lacunae c) Blood d) Ehlers -Danlos syndrome
334. What is the technical term to expulsion of air from the lungs?
 a) Inspiration b) Expiration c) Both of these d) None of the above
335. It is a taxonomic category which includes a group of related genera.
 a) Species b) Genus c) Family d) Order
336. Each ampulla has a sensory area known as _____.
 a) Sensory-neural deafness b) Otoliths
 c) Crista ampullaris d) Chemoreceptors
337. _____ supply the renal tissue, involved in exchanges with the fluid in the tubular region.
 a) Peritubular capillaries b) Juxtaglomerular apparatus
 c) Peritubular capillaries d) Hypernephroma
338. The solute concentration of a solution of water is _____.
 a) Tubular secretion b) Osmolarity
 c) Countercurrent exchanger d) Hypothalamus
339. Watery fluid is called _____ in eye.
 a) Aqueous humor b) Crystalline c) Sclera d) Choroid
340. The limbic system is called _____ because it plays a primary role in the regulation of pleasure, pain, anger, fear, sexual feeling and affection.
 a) Emotional brain b) Brain stem c) Mid brain d) Corpora quadrigemina
341. Fibrous layer of eye is _____.
 a) Aqueous humor b) Crystalline c) Sclera d) Choroid
342. SI unit of mm Hg is
 a) Arteries b) KiloPascal (KPa) c) Small sphincter d) Anastomoses
343. Initially the classification was based on organisms fundamental characteristics _____.
 a) habitat b) morphology c) both of these d) none of these
344. Which does carry motor impulses from the CNS?
 a) Neuroglia b) Afferent neurons
 c) Efferent neurons d) Interneurons
345. Mention the range to make bicarbonates in the saliva?
 a) pH 1.8 b) pH 5.4-7.4 c) pH 7.8 d) pH 7.0
346. Which is the contraction and relaxation of the smooth muscles results in vasoconstriction and vasodilation?
 a) Lymphocytes b) Tunica intima c) Tunica media d) Tunica externa
347. How does mucus adhering the masticated food?
 a) Chyme b) Bolus c) Both of these d) None of the above
348. Find odd one out - Aves.
 a) Peacock b) Crow c) Krait d) Vulture
349. Specimens of both extinct and living organisms can be studied.
 a) Taxonomical keys b) Museums c) Zoological parks d) Marine pa
350. The process of release of urine from the bladder is called _____.
 a) Counter current multiplier b) Atrial Natriuretic Peptide or factor
 c) Micturition d) 1 to 1.5L
351. Which is the character of fluid inside the cells?
 a) Intercellular b) Intracellular c) Extracellular d) All of the above
352. Which is optimum for pepsin, kills bacteria and other harmful organisms and avoids

putrifactionin stomach?

- a) pH 1.8 b) pH 5.4 7.4 c) pH 7.8 d) pH 7.0

353. The advancement in molecular techniques and biochemical assays has led to a new classification is called ____.
- a) Two Domain Classification b) Three Domain Classification
c) Five Domain Classification d) Seven Domain Classification
354. Which type of alveoli that gases can diffuse rapidly through them?
- a) Type I cells b) Type II cells c) Surfactant d) All of the above
355. Periplaneta is a swift runner animal called ____.
- a) Fishing b) Cockroach c) Cursorial d) Vectors
356. Which of the following is not the function of liver?
- a) Production of insulin b) Detoxification
c) Storage of glycogen d) Production of bile
357. ____ also called renal stone or nephrolithiasis.
- a) Uremia b) Renal calculi
c) Pyleothotomy or lithotripsy d) Glomerulo nephritis
358. What is the dental formula in rabbit?
- a) 2033/ 1023 b) 0033/3133 c) 3142/3143 d) 2123/2123
359. It measures the degree of genetic similarity between pools of DNA sequences.
- a) DNA barcoding b) DNA hybridization
c) DNA fingerprinting d) All of the above
360. ____ attached to the lining of the body wall from the 14th segment to the last segment.
- a) Supra - pharyngeal ganglia b) Tufted nephridia
c) Integumentary nephridia d) Septal nephridia
361. Antennal glands or green glands perform excretory function in ____.
- a) Crustaceans b) Nephron c) Agglomerular kidneys d) 120-170 grams
362. In which the two types of lymphocytes are B and T cells?
- a) Agranulocytes b) Lymphocyte c) Monocytes d) Platelets
363. Which is produced while liver breaking the excess amino acids?
- a) Ammonia b) Urea c) Uric acid d) All of the above
364. ____ are involuntary as their functions cannot be directly controlled.
- a) Biopsy b) Autopsy c) Skeletal muscle tissue d) Smooth muscle
365. Longest species of Earthworm ____ is an African giant earthworm.
- a) Microchaetus rappi b) Drawida nilamburansis
c) Coelom d) Coelomocytes
366. How is respiration found in earthworm?
- a) Moist skin b) Tracheal tubes c) Gills d) Vascularized lungs
367. The mouth parts are directed downwards so it is ____.
- a) Hypognathous b) Orthopterous c) Hypopharynx d) Prothoracic
368. Which is the character not included in Cephalochordata?
- a) Marine forms, found in shallow waters, leading a burrowing mode of life
b) Body is unsegmented and covered by a test or tunic
c) Sexes are separate, Fertilization is external
d) Excretion is by protonephridia
369. Which is the character of Nicotine?
- a) It is the chemical that causes addiction
b) It is a stimulant which makes the heart beat faster
c) Raised blood pressure and coronary heart diseases
d) All of the above
370. K⁺ ion gates are more permeable to K⁺ even after reaching the threshold level .
- a) Repolarisation b) Hyperpolarization c) Lazy gates d) Nodes of Ranvier
371. ____ cells have no definite nucleus and DNA exists as a circular chromosomes and do not

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- have histones associated with it.
 a) Archaea b) Bacteria c) Eukarya d) All of these
372. Where does RBCs move quickly?
 a) Cell b) Plasma c) Haemoglobin d) Liver
373. A tube called _____ connects the middle ear cavity with the pharynx
 a) Cataract b) Ceruminous glands c) Middle ear d) Eustachian tube
374. Linear chromosome with histone proteins, ribosomes of _____ type is found in the cytosol.
 a) 70S b) 80S c) Both of these d) None of the above
375. Due to the changes in nature of protein, the lens becomes opaque _____.
 a) Cataract b) Ceruminous glands c) Middle ear d) Eustachian tube
376. A scientific stage that is not basic to taxonomy.
 a) Documentation b) Classification c) Nomenclature d) Identification
377. _____ is the anterior most and largest part of brain.
 a) Autonomic Nervous System b) Brain
 c) Prosencephalon d) Telencephalon
378. Frog belongs to _____ phylum.
 a) Chordata b) Streamlined c) Dark green d) Pale
379. Which constitute 1-3% of the total WBCs?
 a) Agranulocytes b) Lymphocyte c) Monocytes d) Platelets
380. The tissues are called the _____.
 a) issues b) Organs c) Living fabrics d) Organ systems
381. Food is captured by the _____ tongue.
 a) Liver b) Bilobed c) Hydrochloric acid d) Chyme
382. Which is the most common gastrointestinal disorder worldwide?
 a) Peptic ulcer b) Appendicitis c) Hiatus hernia d) Diarrhoea
383. Which is of irregular bowel movement due to poor intake of fibre in the diet and lack of physical activities?
 a) Indigestion b) Constipation c) Both of these d) None of the above
384. _____ have low rates of myosin ATP hydrolysis but have the ability to make large amounts of ATP.
 a) Slow - oxidative fibres b) Fast - oxidative fibres
 c) Fast - glycolytic fibres d) Hydrostatic skeleton
385. Which is seen in Arthropods and most Molluscs?
 a) Capillaries b) Veins c) Coronary artery d) Open circulatory system
386. In which tunica media and elastin fibres are absent?
 a) Capillaries b) Veins c) Coronary artery d) Open circulatory system
387. Lateral line sense organs occur in
 a) Salamander b) Frog c) Water snake d) Fish
388. Choroid plexus is a network of blood capillaries found in the roof of the ventricles and forms _____.
 a) Lateral ventricles I and II b) Septum pellucidum
 c) Aqueduct of Sylvius d) Cerebro spinal fluid
389. _____ facilitates reabsorption of water by increasing the number of aquaporins.
 a) Osmoreceptors b) ADH
 c) Angiotensin Converting Enzyme inhibitors d) Diabetes insipidus
390. The external parietal layer of the Bowmans capsule is made up of _____.
 a) Fenestrae b) Simple squamous epithelium
 c) Podocytes d) Filtration slits
391. Which character is not included in Ctenophora?
 a) Larval stages such as parenchymula and amphiblastula with indirect development
 b) Exclusively marine, radially symmetrical, diploblastic animals

- c) Though they are diploblastic, their mesoglea is different from that of cnidaria
 d) It contains amoebocytes and smooth muscle cells
392. A new species of a _____ has been discovered and named after Scientist Varad Giri, *Cyrtodactylus varadgirii*.
 a) Ground-dwelling lizard b) *Cyrtodactylus*
 c) Both of these d) None of the above
393. Which character is not included in Aschelminthes?
 a) Excretory system consists of rennet glands
 b) First segmented animals to evolve
 c) Sexes are separate; and exhibit sexual dimorphism; females are longer than males
 d) Fertilisation is internal; majority are oviparous few are ovoviviparous
394. Find odd one out - Bilateral symmetry.
 a) Animals which have two similar halves on either side of the central plane
 b) It is an advantageous type of symmetry in triploblastic animals
 c) Animals that have dorsal and ventral sides, anterior and posterior ends, right and left sides are bilaterally symmetrical
 d) Symmetry is found in ctenophores
395. _____ is a terrestrial invertebrate.
 a) *Lampito mauritii* b) Frog c) Epigeic d) Anecic
396. The functioning of kidneys is efficiently monitored and regulated by _____.
 a) Tubular secretion b) Osmolarity
 c) Countercurrent exchanger d) Hypothalamus
397. Who did relate with scientific system of taxonomy and binomial nomenclature?
 a) Theophrastus b) John Ray c) Carolus Linnaeus d) Ernst Haeckel
398. If earthworm gets cut after the 20th segment, the anterior half can _____.
 a) 20 segments b) Regenerate c) Oviducts d) Spermathecae
399. _____ is composed of single layer of tall cells with round to oval nuclei at the base.
 a) Simple epithelium b) Squamous epithelium
 c) Columnar epithelium d) Cuboidal epithelium
400. _____ is a polypeptide hormone released by atrial myocytes.
 a) Haemodialysis b) Kidney transplantation
 c) Joseph E d) Atrial natriuretic peptide
401. _____ produces "milk" to feed their live-born young.
 a) Moulting b) Allergen c) *Diptera punctata* d) Super food
402. Intercostal muscles are found between the
 a. vertebral column b. sternum c. ribs d. glottis
403. _____ is widely distributed in the body.
 a) Tight junctions b) Adhering junctions
 c) Gap junctions d) Connective tissue
404. Which are phagocytic cells that are similar to mast cells and have kidney shaped nucleus?
 a) Agranulocytes b) Lymphocyte c) Monocytes d) Platelets
405. Name of the joint present between the atlas and axis is
 a. synovial joint b. pivot joint c. saddle joint d. hinge joint
406. Which is the condition of Premature Babies have low levels of surfactant in the alveoli may develop?
 a) Newborn Respiratory Distress Syndrome (NRDS)
 b) Nasal Continuous Positive Airway Pressure (NCPAP)
 c) Acute Respiratory Distress Syndrome (ARDS)
 d) All of the above
407. _____ nerves are 10 pairs in frog.
 a) Foramen magnum b) Spinal cord c) Both a & b d) Spinal

408. Which is reverse peristalsis?
a) Vomiting b) Jaundice c) Liver cirrhosis d) Gall stones
409. Excessive stretch of cardiac atrial cells cause an increase in blood flow to the atria of the heart and release_____.
a) Counter current multiplier b) Atrial Natriuretic Peptide or factor
c) Micturition d) 1 to 1.5L
410. Which is caused due to the storage of excess of body fat in adipose tissue?
a) Peptic ulcer b) Appendicitis c) Hiatus hernia d) Obesity
411. The ____ called the brain.
a) Supra-oesophageal ganglion b) Endocrine centre
c) Sub-oesophageal ganglion d) Circum-oesophageal
412. Heart is covered by a double-walled membranecalled ____.
a) Gaseous exchange b) Pericardium
c) Sinus venosus d) Truncus arteriosus
413. What is the technical term to enter the air passages into the lungs?
a) Inspiration b) Expiration c) Both of these d) None of the above
414. ____ secrete mucus, saliva, digestive enzymes and other cell products.
a) Exocrine glands b) Endocrine glands
c) Compound epithelium d) Keratinized squamous epithelium type
415. The sperm develops earlier than the production of ova _____.
a) Nephrostome b) Chloragogen cells c) Monoecious d) Protandrous
416. The sclerites of the dorsal side are called ____.
a) Sclerites b) Tergites c) Sternites d) Pleurites
417. Respiratory system of cockroach is formed of _____.
a) Spiracular muscles b) Spiracles c) Open type d) Haemolymph
418. ____ carry oxygen to the entire body.
a) Salivary glands b) Trachea c) Stigmata d) Tracheoles
419. ____ is made of a single thin layer of flattened cells.
a) Simple epithelium b) Squamous epithelium
c) Columnar epithelium d) Cuboidal epithelium
420. All agglutinogens contain _____.
a) Sucrose, D-galactose b) N-acetyl glucosamine
c) 11 terminal amino acids d) All of the above
421. ____ are the large egg shaped receptors found scattered deep in the dermis.
a) Tactile merkel disc b) Hair follicle receptors
c) Meissners corpuscles d) Pacinian corpuscles
422. Which is the duct of salivary gland?
a) Stensons duct, b) Whartons duct c) Bartholins duct d) All of the above
423. Which may partially block the coronary artery and reduce the blood supply to the heart?
a) Cerebral infarction b) Angina pectoris c) Atheroma d) Chest pain
424. The respiratory pigment in cockroach is
a) Haemoglobin b) Haemocyanin c) Oxyhaemoglobin d) Haemoerythrin
425. Digestion of food takes place by the action of _____.
a) Liver b) Bilobed c) Hydrochloric acid d) Chyme
426. Which have large round nucleus and small amount of cytoplasm?
a) Agranulocytes b) Lymphocyte c) Monocytes d) Platelets
427. It is an evolutionary classification based on how a common ancestry was shared.
a) Cladistics b) Tree diagram c) Cladogram d) All of the above
428. Which does increase during certain types of parasitic infections and allergic reactions?
a) Granulocyte b) Neutrophils c) Eosinophils d) Basophils

429. In which the two types of lymphocytes are B and T cells?
a) Agranulocytes b) Lymphocyte c) Monocytes d) Platelets
430. Where is haemoglobin dissolved?
a) Protoplasm b) Cytoplasm c) Cell d) All of the above
431. ___found in the organs of absorption, secretion and filtration.
a) Simple epithelium b) Squamous epithelium
c) Columnar epithelium d) Cuboidal epithelium
432. Which is defective liver fail to break down haemoglobin?
a) Vomiting b) Jaundice c) Liver cirrhosis d) Gall stones
433. The earthworm has no special ___like lungs or gills.
a) Intestinal caecae b) Vermicasts c) Respiratory organs d) Oxygen
434. Which is the character included in class Aves?
a) Exoskeleton consists of epidermal feathers, scales, claws on legs and the horny covering on the beak
b) Endoskeleton is fully ossified (bony) and the long bones are pneumatic bones
c) Respiration is by compact, elastic, spongy lungs
d) All of the above
435. Which does common in scuba divers?
a) Nitrogen narcosis b) Oxyhaemoglobin
c) Haemoglobin d) All of the above
436. Cladogram considers the following characters
a) Physiological and Biochemical b) Evolutionary and Phylogenetic
c) Taxonomic and systematic d) None of these
437. It enables us to study their food habits and behaviour.
a) Taxonomical keys b) Museums
c) Zoological parks d) Marine parks
438. Which gets deposited in synovial joints?
a) Metaphysis b) Myasthenia gravis c) Metaphysis d) Gouty arthritis or gout
439. Which is emulsified fat?
a) Glyceraldehyde b) Triglycerides c) Diglycerides d) Monoglycerides
440. Which character is not included in Platyhelminthes?
a) Absorbs nutrients directly from the host through their body surface
b) Has an incomplete digestive system.
c) The body of these worms is circular (round)
d) Specialized excretory cells called flame cells help in osmoregulation and excretion
441. ___present on the lateral side of the body.
a) salivary glands b) Trachea c) Stigmata d) Tracheoles
442. Which are absent in arteries and have a narrow lumen?
a) Valves b) KiloPascal (KPa) c) Small sphincter d) Anastomoses
443. Which character is not included in Aschelminthes?
a) Some members like Planaria show high regeneration capacity
b) They are bilaterally symmetrical, triploblastic and pseudocoelomate animals
c) The body is unsegmented and covered by a transparent, collagenous cuticle
d) The alimentary canal is complete
444. Which are characterised by the presence of granules in the cytoplasm?
a) Granulocyte b) Neutrophils c) Eosinophils d) Basophils
445. What is the characteristic feature of respiratory surface?
a) Surface area must be very large b) Richly supplied with blood vessels
c) Should be extremely thin and kept moist d) All of the above
446. Rotation of the eye ball is _____.
a) Trigeminal nerve b) Trochlear nerve c) Vagus d) Hypoglossal
447. Which is the amount of air that moves into the respiratory passage per minute?
a) Minute Respiratory Volume b) Inspiratory capacity

- c) Expiratory capacity d) Dead space
448. The widened opening for each of the semi-circular canals, containing sensory inner-
 vations_____.
- a) Ampulla b) Depolarization c) Proprioception d) Septumpellucidum
449. It is a group of animals having similar morphological features (traits) and is
 reproductively isolated to produce fertile offspring.
- a) Species b) Genus c) Family d) Order
450. The male frog has a pair of___on the ventral side.
- a) Hind limbs b) Vocal sacs c) Nuptial pad d) Muscular sticky tongue
451. ___is the motor centre.
- a) Supra-oesophageal ganglion b) Endocrine centre
 c) Sub-oesophageal ganglion d) Circum-oesophageal
452. ___is situated in the cranial cavity.
- a) Autonomic Nervous System b) Brain
 c) Prosencephalon d) Telencephalon
453. The hindgut is marked by the presence of 100 - 150 yellow coloured___.
- a) Gizzard b) Enteric caecae c) Malpighian tubules d) Hindgut
454. Final digestion takes place in the___.
- a) Intestine b) Microvilli c) Rectum d) Cloaca
455. ___present as paired tufts in the 5th -9th segments.
- a) Supra -pharyngeal ganglia b) Tufted nephridia
 c) Integumentary nephridia d) Septal nephridia
456. ___is the basic unit of classification in the taxonomic hierarchial system.
- a) Species b) Genus c) Family d) Order
457. This is used to amplify a specific gene, or portion of gene.
- a) Restriction Fragment Length Polymorphisms (RFLP)
 b) Polymerase Chain Reaction (PCR)
 c) Both of these
 d) None of the above
458. Lymph is colourless because
- a) WBC are absent b) WBC are present c) Haemoglobin is absent d) RBC are absent
459. The pressure exerted on the oval window is about___more than that on the
 tympanic membrane.
- a) Tectorial membrane b) 20 times
 c) Perilymph d) Conductive deafness
460. The cytoplasm of the muscle fibre is called the___.
- a) Sarcoplasm b) Myoglobin c) Glycosomes d) Anisotropic bands
461. Muscles are derived from
- a. ectoderm b. mesoderm c. endoderm d. neuro ectoderm
462. The absence of nucleus, mitochondria, ribosomes and endoplasmic reticulum
 organelles accommodates more haemoglobin thereby___the oxygen carrying
 capacity of the cell.
- a) Maximising b) Minimising c) Equalising d) No change
463. ___propels mucus by ciliary actions.
- a) Microvilli b) Goblet cell c) Ciliated epithelium d) Nonciliated epithelium type
464. What is the name the colon is lined by dilations?
- a) Peyer's patches b) Crypts of Lieberkuhn
 c) Vermiform appendix d) Haustra
465. The removal of ammonia or other metabolic alternatives such as urea and uric acid
- a) Osmotic homeostasis b) Osmoregulators c) Stenohaline d) Euryhaline
466. Mention the technical term tonarrow gap between the gums and enamel and causes

inflammation?

a) Tartar b) Calculus c) Plaque d) Gingivitis

467. Among the metazoans, cells may be _____grouped together to form tissues, organ and organ systems.
a) functionally isolated b) similar kinds of cells
c) Both of these d) None of the above
468. _____receives sensory input from internal and external environment.
a) Neurons b) Sensory functions
c) Motor functions d) Autonomic functions
469. This category includes one or more related orders with some common characters.
a) Order b) Class c) Phylum d) Kingdom
470. Which character is not included in Platyhelminthes?
a) Sexes are not separate (monoecious)
b) Fertilisation is internal and development is through larval stages
c) Polyembryony is common
d) They are free living or parasitic on aquatic and terrestrial plants and animals
471. Fibres that contain few mitochondria but possess a high concentration of glycolytic enzymes and large stores of glycogen are called _____.
a) Red muscle fibres b) Glycolytic fibres
c) White muscle fibres d) Cartilage
472. _____store the eggs temporarily.
a) Mesovarium b) Testis c) Ovisacs d) Tadpole
473. Further advancement over the tissue level of organization is
a) Acellular level of Organisation b) Cellular level of Organisation
c) Tissue level of Organisation d) Organ level of Organisation
474. _____prevent the backward flow of the blood.
a) Lampito mauritii b) Paired valves c) Ventral vessel d) Lateral hearts
475. After a long deep breath, we do not respire for some seconds due to a. more CO₂ in the blood
b. more O₂ in the blood
c. less CO₂ in the blood d. less O₂ in the blood
476. Which is the character not included in class Amphibia?
a) Eyes have eyelids and the tympanum represents the ear
b) Kidneys are mesonephric
c) Internal fertilization takes place and all are oviparous
d) They are oviparous and development is indirect
477. Which is usually surround the heart in the manner of a crown?
a) Capillaries b) Veins c) Coronary artery d) Open circulatory system
478. The ventricle III is continuous with the ventricle IV in the hind brain through a canal called _____.
a) Lateral ventricles I and II b) Septum pellucidum
c) Aqueduct of Sylvius d) Cerebro spinal fluid
479. Name the pouch like dilation in the colon.
a) Gastric rugae b) Glissons capsule c) Goblet cell d) Haustra
480. Which structure in the ear converts pressure waves to action potentials?
a. Tympanic membrane b. Organ of Corti
c. Oval window d. Semicircular canal
481. The _____is a long, slender, cylindrical nervous tissue.
a) Spinal cord b) Caudaequina
c) Cervical enlargement d) Lumbar enlargement
482. The spiracles open and close by valves regulated by _____.
a) Spiracular muscles b) Spiracles c) Open type d) Haemolymph
483. Match column I with column II and choose the correct option Column

- I Column - II

(P) Lipase (i) Starch
(Q) Pepsin (ii) Cassein
(R) Renin (iii) Protein
(S) Ptyalin (iv) Lipid

a. (P-iv) (Q-ii) (R-i) (S-iii) b. (P-iii) (Q-iv) (R-ii) (S-i)
c. (P-iv) (Q-iii) (R-ii) (S-i) d. (P-iii) (Q-ii) (R-iv) (S-i)

484. Respiration by lungs is called _____.
a) Cutaneous respiration b) Diffusion
c) Buccal respiration d) Pulmonary respiration
485. The triangular muscles are responsible for blood circulation _____.
a) Haemocytes b) 13 chambers c) Alary muscles d) Pulsatile vesicle
486. A person having both antigen A and antigen B on the surface of RBCs belongs to blood group
a) A b) B c) AB d) O
487. Which are involved in blood clotting?
a) Albumin b) Globulin c) Prothrombin and Fibrinogen d) All of the above
488. In small intestine, active absorption occurs in case of
a) Glucose b) Amino acids c) Na⁺ d) All the above
489. ____ can also affect heart, lungs and eyes.
a) Stickler syndrome b) Rhabdomyosarcoma
c) Rheumatoid arthritis d) Sjogrens syndrome
490. ____ is richly vascularised indicating its high metabolic activity.
a) Adipocytes b) Adipose tissue c) Brown fat d) White fat
491. ____ in 7th sternum distinguishes the male from the female.
a) Gynoalvular plates b) Foregut c) Crop d) Proventriculus
492. Which is a defensive mechanism against over dilation of lungs?
a) Dyspnoea b) Epiglottis c) Haemoglobin d) Herring-Breuer reflex
493. ____ explains the evolutionary connection of species by the process of natural selection.
a) Origin of Species b) Systema naturae
c) Historia Generalis Plantarum d) Tautonymy
494. What is the other name of salivary amylase?
a) Pepsin b) Trypsin c) Ptyalin d) Enterokinase
495. Mammals and terrestrial amphibians mainly excrete urea and are called
a) Ureoteles b) Earthworms c) Primitive kidneys d) Kidneys
496. What is the process of the elimination of the undigested substances?
a) Ingestion b) Digestion c) Absorption d) Egestion
497. Appendicular skeleton is
a. girdles and their limbs b. vertebrae
c. skull and vertebral column d. ribs and sternum
498. ____ transmits motor commands from the brain to the skeletal and muscular system.
a) Neurons b) Sensory functions c) Motor functions d) Autonomic functions
499. Sinuses are referred as _____.
a) Haemocoel b) Closed circulatory system
c) Muscular chambered heart d) Two chambered heart
500. Substances such as H⁺, K⁺, NH₄⁺, creatinine and organic acids move into the filtrate from the peritubular capillaries into the tubular fluid is _____.
a) Tubular secretion b) Osmolarity
c) Countercurrent exchanger d) Hypothalamus
501. Vasa recta is absent or reduced in _____.
a) Vasa recta b) Cortical nephrons

- c) Ornithine cycle d) Glomerular filtration
502. CO₂ is transported through blood to lungs as
a. carbonic acid b. oxyhaemoglobin
c. carbamino haemoglobin d. carboxy haemoglobin
503. The large hole in the temporal bone is the
a. Exoskeleton b) Endoskeleton c) Brain box d) External auditory meatus
504. ___ are considered as "Friends of Farmers".
a) Frog b) Earthworms c) Epigeics d) Anecics
505. Who is related with "Five Kingdom Classification"?
a) R.H. Whittaker b) Carl Woese c) Cavalier-Smith d) None of the above
506. What is the inner layer, supports the vascular endothelium?
a) Lymphocytes b) Tunica intima c) Tunica media d) Tunica externa
507. What is the mechanism of some of the substances like fructose are absorbed with the help of the carrier ions like Na⁺ ?
a) Diffusion b) Simple diffusion c) Facilitated transport d) Active transport
508. The ability to sense stimuli arising within the body regarding position, motion and equilibrium
a) Ampulla b) Depolarization c) Proprioception d) Septum pellucidum
509. The opening between the left atrium and the left ventricle is guarded by ____.
a) Tricuspid valve b) Bicuspid valve
c) Semilunar valves d) Trabeculae carneae
510. What is a digestive disorder in which the food is not properly digested leading to a feeling of fullness of stomach?
a) Indigestion b) Constipation c) Both of these d) None of the above
511. Prevention of substances from leaking across the tissue is provided by
a) Tight junction b) Adhering junction c) Gap junction d) Elastic junction
512. ___ is a South Indian species of earthworm and can reach a maximum up to 1 meter.
a) Microchaetus rappi b) Drawida nilamburansis
c) Coelom d) Coelomocytes
513. The connective tissue covering the whole muscle is the ____.
a) Epimysium b) Perimysium c) Endomysium d) Sarcolemma
514. If there are more than one species in the genus it is known as
a) Monotypic genus b) Polytypic genus
c) Both of these d) None of the above
515. Which circulatory system found in arthropods, molluscs, echinoderms, and urochordates?
a) Open type b) Closed type c) Both of these d) None of these
516. ___ means reflex actions.
a) Neurons b) Sensory functions
c) Motor functions d) Autonomic functions
- The head of humerus articulates with the ___ of the scapula and forms the shoulder joint. Humerus b) Glenoid cavity c) Olecranon process d) Pelvic girdle
517. Which is the maximum volume of air that can be moved out during a single breath?
a) Vital capacity (VC) b) Inspiratory capacity (IC)
c) Expiratory capacity (EC) d) Total Lung Capacity (TLC)
518. The ___ is auto functioning and self governed
a) Cranial nerves b) Spinal nerves
c) Somatic neural system d) Autonomic neural system
519. Which type of heart is in fishes ?
a) Haemocoel b) Closed circulatory system
c) Muscular chambered heart d) Two chambered heart
520. It is the only one bone without any joint.

- a) Hyoid bone b) Foramen magnum c) Atlas d) Sternum
521. Which does include urea, amino acids, glucose, fats and vitamins?
a) Organic constituents b) Inorganic constituents c) Both of these d) None of the above
522. The group of classes with similar distinctive characteristics constitute a.
a) Order b) Class c) Phylum d) Kingdom
523. _____ lie entirely within the CNS between the afferent and efferent neurons.
a) Neuroglia b) Afferent neurons
c) Efferent neurons d) Interneurons
524. Regulation of the visceral organs is _____.
a) Trigeminal nerve b) Trochlear nerve c) Vagus d) Hypoglossal
525. Find odd one out - Bilateral symmetry.
a) Exhibits cephalisation
b) Sensory and brain structures are concentrated
c) Animals which have two similar halves on either side of the central plane
d) Symmetry is found in comb jellyfish
526. What is the name of sphincter used to prevent regurgitation of food between stomach and duodenum?
a) Sphincter muscle b) Cardiac sphincter
c) Pyloric sphincter d) All of the above
527. What does lead while oxygen level decreasing in the blood?
a) Emaciation b) Vomiting c) Giddiness d) Suffocation
528. What is the characteristic feature of respiratory surface?
a) Should be in direct contact with the environment
b) Should be permeable to respiratory gases
c) Both of these
d) None of the above
529. Which secrete substances such as heparin, serotonin and histamines?
a) Granulocyte b) Neutrophils c) Eosinophils d) Basophils
530. Which of these functions could or could not be carried out by a red blood cell? Briefly justify your answer.
a) Protein synthesis b) Cell division c) Lipid synthesis d) Active transport
531. Which of the following is an egg laying mammal?
a) Delphinus b) Macropus c) Ornithorhynchus d) Equus
532. Which protein is converted to its active form called thrombin in the presence of calcium and vitamin K?
a) Rh1 b) Rh2 c) Erythroblastosis foetalis d) Prothrombin
533. _____ primarily contain collagen fibres in rows.
a) Reticular connective tissue
b) Dense connective tissues
c) Dense regular connective tissues
d) Dense irregular connective tissues
534. Most of the _____ in vertebrate embryos are replaced by bones in adults.
a) Elastic connective tissue b) Specialised connective tissues
c) Cartilages d) Bones
535. When 1500 mL air is in the lungs, it is called
a. vital capacity b. tidal volume
c. residual volume d. inspiratory reserve volume
536. Which is the character included in class Aves?
a) The presence of feathers and the ability to fly except for flightless birds
b) Forelimbs are modified into wings
c) Skin is dry and devoid of glands except the oil gland or preen gland
d) All of the above
537. What does lead to redness and bleeding of the gums and to bad smell?

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- a) Tartar b) Calculus c) Plaque d) Gingivitis
538. Name the duct of parotid gland.
a) Sphincter of boydon b) Sphincter of oddi
c) Stensons duct d) Succusertericus
539. Each eye of Cockroach is formed of about 2000 simple eyes called the _____.
a) Ommatidia b) Mosaic vision c) Malpighian tubules d) Uricotelic
540. _____ are found in deeper layers of the soil.
a) Endogeics b) Lampito mauritii c) Porphyrin d) Metameres
541. How is the diffusion membrane of alveolus is made up of?
a) The thin squamous epithelial cells of the alveoli
b) The endothelium of the alveolar capillaries
c) The basement substance
d) All of the above
542. _____ differ from bacteria in cell wall composition and differs from bacteria and eukaryotes in membrane composition and rRNA types.
a) Archaea b) Prokarya c) Eukarya d) All of these
543. The _____ controls the conditioned reflex.
a) Unconditional reflex b) Conditioned reflex
c) Pavlov d) Cerebral cortex
544. _____ tissue is used to movement.
a) Epithelial tissue b) Connective tissue
c) Muscle tissue d) Nervous tissue
545. Life threatening soft tissue tumour of head, neck and urinogenital tract _____.
a) Stickler syndrome b) Rhabdomyosarcoma
c) Rheumatoid arthritis d) Sjogrens syndrome
546. At the junction of the sclera and the cornea, is a channel called _____.
a) Retina b) Canal of schlemm c) Ciliary muscle d) Accommodation.
547. Larval stage of frog is _____.
a) Mesovarium b) Testis c) Ovisacs d) Tadpole
548. _____ is used as a foliar spray and helps to induce plant growth.
a) Vermitech b) Vermiculture c) Vermicomposting d) Vermiwash
549. Which is the character not included in class Mammalia?
a) Their skin is glandular in nature, consisting of sweat glands, scent glands and sebaceous glands.
b) Respiration is by compact, elastic, spongy lungs that are continuous with air sacs to supplement respiration
c) Exoskeleton includes horny epidermal horns, spines, scales, claws, nails, hooves and bony dermal plates
d) Teeth are thecodont, heterodont and diphyodont
550. Skeletal elements are located inside the organisms with muscles outside _____.
a) Exoskeleton b) Endoskeleton c) Brain box d) External auditory meatus
551. _____ whose cell body is in the brain or spinal cord.
a) Preganglionic neuron b) Autonomic ganglion
c) Postganglionic neuron d) Exteroceptors
552. The _____ is the part of the peripheral neural system associated with the voluntary control of body movements.
a) Cranial nerves b) Spinal nerves
c) Somatic neural system d) Autonomic neural system
553. _____ cavity or depression especially in the bone.
a) Acinus b) Collagen c) Lacunae d) Macrophages

554. Which are blood samples usually taken rather than artery because of low pressure?
a) Capillaries b) Veins c) Coronary artery d) Open circulatory system
555. Which does temporary stopping of respiration?
a) Apnoea b) Book gills c) Book lungs d) COLD
556. Which does help in collecting nitrogenous waste and expelling environment?
a) Excretory system b) Ammonia c) Ammonoteles d) Uricoteles
557. Which is the pressure in the auricles increases than that of the ventricular pressure?
a) Tachycardia b) Bradycardia c) Ventricular diastole d) Atrial systole
558. The formation of ___ is the first step towards evolution of body plan in sponges.
a) cells b) tissues c) organs d) organ systems
559. On the floor of the buccal cavity lies a large _____.
a) Hind limbs b) Vocal sacs c) Nuptial pad d) Muscular sticky tongue
560. _____ while in soil are ureoteles and when in water are ammonoteles.
a) Ureoteles b) Earthworms c) Primitive kidneys d) Kidneys
561. The superficial region of the cerebrum is called _____.
a) Cerebrum b) Cerebral cortex
c) Corpus callosum d) Association areas
562. Which are also involved in inflammatory reactions?
a) Granulocyte b) Neutrophils c) Eosinophils d) Basophils
563. Name the bile pigments.
a) Bilirubin b) Biliverdin c) Both of these d) None of the above
564. Actin has polypeptide subunit called _____.
A) Sarcomere b) Actin c) Meromyosin d) G-actin
565. Which is the total volume of air which the lungs can accommodate after forced inspiration?
a) Vital capacity (VC) b) Inspiratory capacity (IC)
c) Expiratory capacity (EC) d) Total Lung Capacity (TLC)
566. _____ located beneath the skin.
a) Specialized connective tissues b) Areolar connective tissue
c) Tissue fluid d) Adipose tissue
567. _____ cells are columnar, but unequal in size.
a) Pseudo-stratified epithelial b) Glandular epithelium
c) Goblet cells d) Salivary gland
568. Which of the following are the sense organs of Cockroach?
a) Antennae, compound eyes, maxillary palps, anal cerci
b) Antennae, compound eye, maxillary palps
c) Antennae, ommatidia, maxillary palps, sternum
d) Antennae, eyes, maxillary palps, and tarsus of walking legs
569. _____ are dense regular, dense irregular and elastic.
a) Connective tissues b) Fibres
c) Loose connective tissues d) Dense connective tissues
570. Circulation of the blood was first described by _____ (1628).
a) William Harvey b) James Elam and Peter Safar c) CPR d) Defibrillation
571. A earthworm is divided 1st - 13th segments _____ region.
a) Setigerous sac b) Pre clitellar c) Clitellar d) Post - clitellar
572. The _____ acts as the command and control system.
A) Pre-synaptic neuron b) Cleft c) Exocytosis d) Brain
573. _____ is a contractile tissue present only in the heart.
a) Cardiac muscle tissue b) Parkinsons disease
c) Alzheimers disease d) Nervous tissue
574. _____ that are involved in olfactory reflexes and emotional responses to odour.

- A) Hypothalamus b) Infundibulum
c) Mammillary bodies d) Satiety centre
575. Breathing is controlled by
a. cerebrum b. medulla oblongata c. cerebellum d. pons
576. What is the name of the process of digestion involves intake of the food?
a) Ingestion b) Digestion c) Absorption d) Assimilation
577. Skeletal elements are located upon body surface or in the skin _____.
a) Exoskeleton b) Endoskeleton c) Brain box d) External auditory meatus
578. The effective glomerular pressure of 10mmHg results in_____.
a) Passive process b) 180l c) Glomerular pressure d) Ultrafiltration
579. The meganephridium has an internal funnel like opening called the____.
a) Nephrostome b) Chloragogen cells c) Monoecious d) Protandrous
580. The cockroach____can cause asthma to sensitive people.
a) Moulting b) Allergen c) Diploptera punctata d) Super food
581. The end product of Ornithine cycle is
a. carbon dioxide b. uric acid c. urea d. ammonia
582. Which is the amount of air inspired or expired with each normal breath?
a) Tidal Volume (TV) b) Inspiratory Reserve Volume (IRV)
c) Expiratory Reserve Volume (ERV) d) Residual Volume (RV)
583. In some genus there is only one species which is called as _____.
a) Monotypic genus b) Polytypic genus
c) Both of these d) None of the above
584. The body of a frog is____to help in swimming.
a) Chordata b) Streamlined c) Dark green d) Pale
585. Which character is not included in Echinodermata?
a) Excretory organs are absent
b) The nervous system and sensory organs are poorly developed.
c) The circulatory system is open type without heart and blood vessels
d) Development is indirect with a veliger larva
586. The parts starting from the external nostrils up to the terminal bronchioles constitute the_
a) Conducting zone b) Respiratory zone
c) Both of these d) None of the above
587. If the cardiac sphincter does not contract properly during the churning action of the stomach the gastric juice with acid may flow back into the oesophagus and cause heart burn, resulting in
a) LES b) COLD c) GERD d) MALT
588. _____is used to heat the blood stream to warm the body.
a) Adipocytes b) Adipose tissue c) Brown fat d) White fat
589. Which is the character not included in class Amphibia?
a) First vertebrates and tetrapods to live both in aquatic as well as terrestrial habitats Lay cleidoic eggs with extraembryonic membranes like amnion, allantois, chorion and yolk sac
b) Their skin is smooth or rough, moist, pigmented and glandular
c) They show hibernation and aestivation
590. _____is a polymer of monomeric G-actins. F-actin
a) Andrew F. Huxley and Rolf Niedegerke
c) Contraction
d) Acetycholine
592. There are 31 pairs of _____.
a) Cranial nerves b) Spinal nerves

c) Somatic neural system d) Autonomic neural system

593. Earthworms are also used as bait in ____.
- a) Fishing b) Cockroach c) Cursorial d) Vectors
594. Who is related with "Three Domain Classification"?
- a) R.H. Whittaker b) Carl Woese c) Cavalier-Smith d) All of the above
595. In which AV valves are open while the semi lunar valves are closed?
- a) Tachycardia b) Bradycardia c) Ventricular diastole d) Atrial systole
596. Which is the inflammation of the lungs due to infection caused by bacteria?
- a) Asthma b) Emphysema c) Pneumonia d) Tuberculosis
597. The ____ is devoid of teeth.
- a) Maxillary teeth b) Vomerine teeth c) Lower jaw d) Oesophagus
598. The nymph grows by ____ or ecdysis about 13 times to reach the adult form.
- a) Moulting b) Allergen c) Diploptera punctata d) Super food
599. ____ is called the father of taxonomy (classical).
- a) Carolus Linnaeus b) Aristotle
c) Augustin Pyramus de Candolle d) Charles Darwin
600. The ____ is made up of seven bones called tarsals.
- a) Ischium b) Acetabulum c) Tarsus d) Metatarsus
601. Which sphincter which guard the opening of the ampulla of Vater into the duodenum?
- a) Sphincter of Boyden b) Sphincter of Oddi
c) Stenson's duct d) Succus entericus
602. Which type of heart is in all vertebrates?
- a) Haemocoel b) Closed circulatory system
c) Muscular chambered heart d) Two chambered heart
603. If the species name is framed after any person's name the name of the species shall end with ____.
- a) i b) ii c) ae d) All of the above
604. ____ are small light pressure receptors found just beneath the epidermis.
- a) Tactile Merkel disc b) Hair follicle receptors
c) Meissner's corpuscles d) Pacinian corpuscles
605. The myocardium of the ventricle is thrown into irregular muscular ridges called
- a) Tricuspid valve b) Bicuspid valve
c) Semilunar valves d) Trabeculae carneae
606. The increased pressure generates pressure waves in the fluid of ____.
- a) Tectorial membrane b) 20 times
c) Perilymph d) Conductive deafness
607. The ____ is a sensory ridge located on the top of the Basilar membrane.
- a) Perilymph b) Basilar membrane c) Organ of Corti d) Stereocilia
608. Almost ____ of animals are invertebrates or animals without backbone.
- a) 96 percent b) 97 percent c) 98 percent d) 99 percent
609. Which has haemolymph as the circulating fluid and is pumped by the heart, which flows through blood vessels into the sinuses?
- a) Capillaries b) Veins c) Coronary artery d) Open circulatory system
610. Which give the tongue an abrasive feel?
- a) Gustatory receptor b) Papillae c) Gustatory hairs d) Skin
611. ____ are the cells responsible for producing the skin pigment.
- a) Ruffini endings b) Krause end bulbs c) Melanocytes d) Vitiligo
612. ____ make the muscles stronger.
- a) Strength exercises b) Myasthenia gravis
c) Metaphysis d) Muscle pull

613. Which is carried in the RBCs as carbaminohaemoglobin?
 a) Dissolved in plasma b) Bound to haemoglobin
 c) Both of these d) None of the above
614. The _____ serves the upper limb.
 a) Spinal cord b) Caudaequina
 c) Cervical enlargement d) Lumbar enlargement
615. Which character is not included in Sponges?
 a) The water transport system is helpful in food gathering, circulation, respiration and removal of waste
 b) Choanocytes or collar cells are special flagellated cells lining the spongocoel and the canals
 c) The body is supported by a skeleton made up of calcareous and siliceous spicules or spongin or both
 d) They have a central vascular cavity or coelenteron with a single opening called mouth or hypostome
616. What is chyme....?
 a) The process of conversion of fat into small droplets. The process of conversion of micelles substances of glycerol into fatty droplet.
 b) The process of preparation of incompletely digested acidic food through gastric juice.
 c) The process of preparation of completely digested liquid food in midgut.
617. Earthworms are hermaphrodites or _____.
 a) Nephrostome b) Chloragogen cells c) Monoecious d) Protandrous
618. Which is the part of the brain tissue that is supplied by this damaged artery dies due to lack of oxygen?
 a) Cerebral infarction b) Angina pectoris c) Atheroma d) Chest pain
619. Which are characterised by the absence of granules in the cytoplasm?
 a) Agranulocytes b) Lymphocyte c) Monocytes d) Platelets
620. The term species was coined by _____.
 a) Aristotle b) John Ray c) Carolus Linnaeus d) Charles Darwin
621. Periplaneta is a _____ animal.
 a) Fishing b) Cockroach c) Cursorial d) Vectors
622. Which blood is pumped by the heart and flows through blood vessels?
 a) Haemocoel b) Closed circulatory system
 c) Muscular chambered heart d) Two chambered heart
623. Some nephrons have very long loop of Henle that run deep into the medulla and are called _____.
 a) Distal convoluted tubule b) Collecting duct
 c) Juxta medullary nephrons d) Glomerulus
624. Which is the space between the membranes?
 a) Epicardium b) Myocardium c) Endocardium d) Pericardial space
625. Which does take sensory impulses to the Central Neural system?
 a) Neuroglia b) Afferent neurons
 c) Efferent neurons d) Interneurons
626. Fibres and fibroblasts are compactly packed in the _____.
 a) Reticular connective tissue
 b) Dense connective tissues
 c) Dense regular connective tissues
 d) Dense irregular connective tissues
627. _____ is a firm, elastic connective tissue produced by the cells, called chondro-cytes.
 a) Red muscle fibres b) Glycolytic fibres
 c) White muscle fibres d) Cartilage
628. In _____ is the length of the muscle changes but the tension remains constant.

- a) Isotonic contraction b) Isometric contraction
c) Myosin d) Oxidative fibres
629. What is meant by Deuterostomia?
a) They have a true coelom called enterocoel, formed from the archenteron.
b) The embryonic blastopore develops into mouth
c) This division includes three subdivisions
d) Acoelomata, pseudocoelomata and schizocoelomata
630. Which is the character not included in class Mammalia?
a) External ears or pinnae are present
b) The heart is four chambered and possess a left systematic arch
c) Endoskeleton is fully ossified (bony) and the long bones are hollow with air cavities
d) Mature RBCs are circular, biconcave and non nucleated
631. _____ are found in upper layers of the soil.
a) Frog b) Earthworms c) Epigeics d) Anecics
632. Which character is not included in Mollusca?
a) The digestive system is complete with mouth on ventral side and anus on the dorsal side Open type of circulatory system is seen except for cephalopods
b) Blood contains haemocyanin, a copper containing respiratory pigment
c) They are dioecious and oviparous
633. _____ with more sensitivity but less resolution.
a) Ommatidia b) Mosaic vision c) Malpighian tubules d) Uricotelic
634. Which is the presence of air in the pleural cavity which causes collapsing of lungs?
a) Hypoxia b) Pneumothorax c) Vocal cords d) Yawning
635. Kidneys produce about _____ of glomerular filtrate in 24 hours.
a) Passive process b) T80l c) Glomerular pressure d) Ultrafiltration
636. Common oviduct known as _____, which opens into the genital chamber.
a) Ovarioles b) Vagina c) Ootheca d) Paurometabolus
637. The hair cells are embedded in a gelatinous otolithic membrane that contains small calcareous particles called
a) Sensory-neural deafness b) Otoliths
c) Crista ampullaris d) Chemoreceptors
638. Which are also called heterophils?
a) Granulocyte b) Neutrophils c) Eosinophils d) Basophils
639. It occurs due to deficiency of vitamin D and hormonal imbalance
a) Rheumatoid arthritis b) Gouty arthritis or gout
c) Osteoporosis d) Endurance
640. Which are special cells in bone marrow?
a) Agranulocytes b) Lymphocyte c) Monocytes d) Megakaryocytes
641. Podocytes are the cells present on the
a. Outer wall of Bowmans capsule b. Inner wall of Bowmans capsule
- c. neck of nephron d. Wall glomerular capillaries
642. The _____ are known to play a major role in regeneration, immunity and wound healing.
a) Microchaetus rappi b) Drawida nilamburansis
c) Coelom d) Coelomocytes
643. The hormone which helps in the reabsorption of water in kidney tubules is
a. cholecystokinin b. angiotensin II
c. antidiuretic hormone d. pancreaseymin
644. A cockroach can hold its breath for _____.
a) Week b) 45 minutes
c) Double ventral nerve cord d) Sub-oesophageal ganglion
645. Which is associated with the closure of the semilunar valves?

- a) Aorta b) Chordate tendineae c) Lub sound d) Dub sound
646. What is the dental formula in man?
a) 2033/1023 b) 0033/3133 c) 3142/3143 d) 2123/2123
647. Make the correct pairs.
Column-I Column-II
(P) Tidal volume i. 1000 to 1100ml
(Q) Residual volume ii. 500 ml
(R) Expiratory reserve volume iii. 2500 to 3000 ml
(S) Inspiratory reserve volume iv. 1100 to 1200ml
(a) P - ii , Q - iv , R - i , S - iii (b) P - iii , Q - ii , R - iv , S - i
(c) P - ii , Q - iv , R - iii , S - i (d) P - iii , Q - iv , R - i , S - ii
648. A row of small and pointed ___ is found on the inner region of the upper jaw.
a) Maxillary teeth b) Vomerine teeth c) Lower jaw d) Oesophagus
649. ___ is the creation of tension in the muscle which is an active process.
a) F-actin
b) Andrew F. Huxley and Rolf Niedergerke
c) Contraction
d) Acetylcholine
650. ___ is a chronic neurodegenerative disease.
a) Cardiac muscle tissue b) Parkinsons disease
c) Alzheimers disease d) Nervous tissue
651. It is a group of closely related species which have evolved from a common ancestor.
a) Species b) Genus c) Family d) Order
652. Which of the following statement concerning 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 arcs
d. Its pathways always involve four neurons
653. --Which is a thin elastic cartilaginous flap which covers the glottis and prevents the entry of food into the larynx?
a) Dyspnoea b) Epiglottis c) Haemoglobin d) Herring-Breuer reflex
654. Skeletal muscles are attached to the bones by
a. tendon b. ligament c. pectin d. fibrin
655. Aldosterone acts at the distal convoluted tubule and collecting duct resulting in the absorption of water through
a. Aquaporins b. spectrins c. GLUT d. Chloride channels
656. What is the breathing rate of healthy human?
a) 10-16 times/minute b) 12-14 times/minute
c) 12-16 times/minute d) 72-80 times/minute
657. Which of the following hormones stimulate the production of pancreatic juice and bicarbonate?
a) Angiotensin and epinephrine b) Gastrin and insulin
c) Cholecystokinin and secretin d) Insulin and glucagon
658. Which is the second largest gland in the digestive system?
a) Liver b) Pancreas c) Spleen d) Salivary
659. The C-shaped space found inside each cerebral hemisphere forms the _____.
a) Lateral ventricles I and II b) Septum pellucidum

- c) Aqueduct of Sylvius d) Cerebro spinal fluid
660. The muscle fibre is surrounded by the
a) Epimysium b) Perimysium c) Endomysium d) Sarcolemma
661. The pigment present in the muscle fibre to store oxygen is
a. myoglobin b. troponin c. myosin d. actin
662. ___supplies blood to the lungs and skin.
a) Systemic trunk b) Pulmo-cutaneous trunk c) Carotid d) Blood
663. Which is the failure of tissues for any reason to receive an adequate supply of oxygen?
a) Hypoxia b) Pneumothorax c) Vocal cords d) Yawning
664. Earthworm divides it into a number of compartments called segments or _____.
a) Endogeics b) Lampito mauritii c) Porphyrin d) Metameres
665. ___are yellow coloured structures attached midgut and hindgut.
a) Malpighian tubules b) Mushroom shaped gland
c) Seminal vesicles d) Gonapophyses
666. Which is recorded the electrical activity of the heart over a period of time using electrodes placed on the skin, arms, legs and chest?
a) Electrocardiogram b) Sinu Auricular node c) P wave d) T wave
667. At the venous end of the capillary bed, the osmotic pressure is
a) Greater than the hydrostatic pressure b) Result in net outflow of fluids
c) Results in net absorption of fluids d) No change occurs.
668. Which is the character not included in class Mammalia?
a) Mammals have a large brain when compared to other animals
b) They show greatest intelligence among all animals
c) All are homeothermic, sexes are separate and fertilization is internal
d) Kidneys are mesonephric
669. Due to the presence of three pairs of walking legs it is also called _____.
a) Cervicum b) Hexapoda c) Tarsomeres d) Tegmina
670. Marine organisms are maintained in protected environments.
a) Taxonomical keys b) Museums c) Zoological parks d) Marine parks
671. Reptiles, birds, land snails and insects excrete uric acid crystals, with a minimum loss of water and are called _____.
a) Excretory system b) Ammonia c) Ammonoteles d) Uricoteles
672. Which does refer to an eroded area of the tissue lining in the stomach or duodenum?
a) Peptic ulcer b) Appendicitis c) Hiatus hernia d) Diarrhoea
673. Name the sphincter which guard opening of the bile duct before it joins with the pancreatic duct.
a) Sphincter of boydon b) Sphincter of oddi
c) Stensons duct d) Succusertericus
674. A living organism is differentiated from nonliving structure based on
a) Reproduction b) Growth c) Metabolism d) Movement
675. Which are excretory structures with special cells in the Platyhelminthes?
a) Flame cells b) Solenocytes c) Nematodes d) Insects
676. ___commonly called adipose or fat cells.
a) Adipocytes b) Adipose tissue c) Brown fat d) White fat
677. The ___serves the lower limbs.
a) Spinal cord b) Caudaequina
c) Cervical enlargement d) Lumbar enlargement
678. Match the following.
A) Gustatory receptors - i) Sense of smell
B) Olfactory receptors - ii) Changes in temperature

- C) Tactile receptors - iii) Detect chemical changes
 D) Chemoreceptors - iv) Sense of taste
 E) Thermoreceptors - v) Sense of touch
 a) A - iv), B - i), C - v), D - iii), E - ii)
 b) A - i), B - ii), C - iii), D - iv), E - v)
 c) A - iv), B - ii), C - iii), D - i), E - v)
 d) A - i), B - iii), C - ii), D - v), E - iv)
679. The ___ is a small air-filled cavity in the temporal bone.
 a) Cataract b) Ceruminous glands c) Middle ear d) Eustachian tube
680. The bowmans capsule and the glomerulus together constitute the _____.
 a) Medullary pyramids b) Renal columns of Bertini
 c) Renal hilum d) Renal corpuscle
681. Which one is incorrectly matched?
 a) Pepsin - stomach b) Renin - liver
 c) Trypsin - intestine d) Ptyalin - mouth
682. 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.
683. Collar cells of sponges is known as _____.
 a) Pinacocytes b) Choanocytes c) Chaoanoflagellates d) All of the above
684. Which does facilitate the transport of ions, hormones, lipids and assist in immunefunction?
 a) Albumin b) Globulin c) Prothrombinand Fibrinogen d) All of the above
685. The nymph resembles the adult and undergoes _____.
 a) Moulting b) Allergen c) Diploptera punctata d) Super food
686. What is the opening of the hepato-pancreatic duct into the duodenum?
 a) Malphigians capsule b) Glissons capsule
 c) Cystic duct d) Sphincter of Oddi
687. Which of the following animals has a true coelom ?
 a) Ascaris b) Pheretima c) Sycon d) Taenia solium
688. Periplaneta has an ___ of circulatory system.
 a) Spiracular muscles b) Spiracles c) Open type d) Haemolymph
689. This colour of the earthworm is mainly due to the presence of ___ pigment.
 a) Endogeics b) Lampito mauritii c) Porphyrin d) Metameres
690. Which lies at the junction between the arterioles and capillaries to regulate the blood supply?
 a) Arteries b) KiloPascal (KPa) c) Small sphincter d) Anastomoses
691. The type of movement exhibits by the macrophages are
 a. flagellar b. ciliary c. muscular d. amoeboid
692. Which that flter the fluid from the lymphatic vessels of the skin are highly concentrated in the neck, inguinal, axillaries, respiratory and digestive tracts?
 a) Serum b) Heparin c) Lymph d) Lymph nodes
693. Defects in ADH receptors or inability to secrete ADH leads to a condition called _____.
 a) Osmoreceptors b) ADH
 c) Angiotensin Converting Enzyme inhibitors d) Diabetes insipidus
 b) First capillary bed of the nephron is the ___. Distal convoluted tubule b) Collecting duct
 c) Juxta medullary nephrons d) Glomerulus
694. ___ are short, stumpy, and helps to bear the weight of the body.
 a) Nictitating membrane b) Tympanic membranes
 c) Cloacal aperture d) Fore limbs

695. The opening of right and left ventricles into the pulmonary artery and aorta are guarded by aortic and pulmonary valves and are called _____.
 a) Tricuspid valve b) Bicuspid valve
 c) Semilunar valves d) Trabeculae carneae
696. Smooth muscle present in the ciliary body is called the _____.
 a) Retina b) Canal of Schlemm c) Ciliary muscle d) Accommodation
697. _____ forms the floor of the diencephalon.
 a) Hypothalamus b) Infundibulum
 c) Mammillary bodies d) Satiety centre
698. Which is formed of loose connective tissue containing nerves, blood, lymph vessels and the sympathetic nerve fibres that control the secretions of intestinal juice?
 a) Serosa b) Muscularis c) Submucosa d) Mucosa
699. _____ develops from the mesoderm.
 a) Tight junctions b) Adhering junctions
 c) Gap junctions d) Connective tissue
700. The process of assigning scientific names to animals or taxonomic group is called .
 a) Systematics b) Nomenclature c) Biodiversity d) Classification
701. Digested food is absorbed by the numerous finger-like folds _____.
 a) Intestine b) Microvilli c) Rectum d) Cloaca
 b) The _____ is broader than the midgut. Gizzard b) Enteric caecae c) Malpighian tubules d) Hindgut
702. Which are the thick walls, non-collapsible to withstand high pressure?
 a) Arteries b) KiloPascal (KPa) c) Small sphincter d) Anastomoses
703. This is due to lack of ATP and accumulation of lactic acid by anaerobic breakdown of glucose.
 a) Synovial joints or Diarthroses joints b) Myasthenia gravis
 c) Tetany d) Muscle fatigue
704. The functional unit of a muscle fibre is
 a. sarcomere b. sarcoplasm c. myosin d. actin
705. Beneficial bacteria is called _____.
 a) Probiotic b) Pathogenic c) Cyanobacteria d) All of the above
706. The secretion of the _____ serves to cement the spermatozoa.
 a) Spermatogonia b) Ciliary rosettes c) Vasa deferentia d) Prostate gland
707. Which character is not included in Platyhelminthes?
 a) Mostly endoparasites of animals including human beings
 b) Fertilization is external and development is indirect and includes cydippid larva
 c) Hooks and suckers serve as organs of attachment
 d) Their body is not segmented, but some exhibit pseudosegmentation
708. Two pairs of seminal funnels called _____ are situated in the same segments as the testes.
 a) Spermatogonia b) Ciliary rosettes c) Vasa deferentia d) Prostate gland
709. Find odd one out - Mammals.
 a) Hooded Pitohui b) Blue whale c) Monkey d) Elephant
710. _____ exhibits all the fundamental characteristics of Class Insecta.
 a) Fishing b) Cockroach c) Cursorial d) Vectors
711. In *Metaphire posthuma*, the 26th segment has a pair of short conical outgrowths _____.
 a) Intestinal caecae b) Vermicasts c) Respiratory organs d) Oxygen
712. _____ have two processes with one axon and one dendrite.
 a) Bipolar neurons b) Unipolar neurons
 c) Intracellular fluid d) Resting membrane Potential

713. Which is a decreased heart rate ?
 a) Tachycardia b) Bradycardia c) Ventricular diastole d) Atrial systole
714. Vertebrates have complex tubular organs called _____.
 a) Ureoteles b) Earthworms c) Primitive kidneys d) Kidneys
715. Erythroblastosis foetalis is due to the destruction of
 a) Foetal RBCs b) Foetus suffers from atherosclerosis
 c) Foetal WBCs d) Foetus suffers from mianmata
716. _____ is not contagious.
 a) Ruffini endings b) Krause end bulbs c) Melanocytes d) Vitiligo
717. _____ examination to discover the cause of death.
 a) Biopsy b) Autopsy c) Skeletal muscle tissue d) Smooth muscle
718. _____ are immovable fixed joints in which no movement between the bones.
 a) Lever system b) Motor neuron
 c) Fibrous joints or Synarthroses d) Cartilaginous joints or Amphiarthroses
719. Which of the following is not present in same rank?
 a) Primata b) Orthoptera c) Diptera d) Insecta
720. What does bile salt reduce?
 a) Emulsification of fats b) Digestion of lipids
 c) Surface tension of fat droplets d) All of the above
721. A single U-shaped _____ is present at the base of the buccal cavity
 a) Hyoid bone b) Foramen magnum c) Atlas d) Sternum
722. Which is a neurotransmitter found throughout the nervous system?
 a) F-actin b) Andrew F. Huxley and Rolf Niedergerke
 c) Contraction d) Acetycholine
723. _____ are Areolar, Adipose and Reticular.
 a) Connective tissues b) Fibres
 c) Loose connective tissues d) Dense connective tissues
724. Which layer generate the movements of the small intestine?
 a) Serosa b) Muscularis c) Submucosa d) Mucosa
725. Which is the largest gland in the digestive system?
 a) Liver b) Pancreas c) Spleen d) Salivary
726. _____ is the functional contractile unit of striated muscle.
 a) Myoglobin b) Sarcolemma c) Sarcomere d) Ilium
727. Which is the duct of salivary gland?
 a) Stensons duct, b) Whartons duct c) Duct of Rivinis d) All of the above
728. Which are differentiated in the bone marrow?
 a) Granulocyte b) Neutrophils c) Eosinophils d) Basophils
729. _____ can be defined as a group of organisms that have similar morphology and physiology and can interbreed to produce fertile offsprings
 a) Species b) Genus c) Family d) Order
730. It is a character of Eucoelom?
 a) The body cavity is not fully lined by the mesodermal epithelium, but the mesoderm is formed as scattered pouches between the ectoderm and endoderm
 b) It is a fluid-filled cavity that develops within the mesoderm and is lined by mesodermal epithelium
 c) A body cavity is filled with pseudocoelomic fluid
 d) Their body is solid without a perivisceral cavity
731. _____ are surface dwellers.
 a) Frog b) Earthworms c) Epigeics d) Anecics
732. A pair of _____ connectives is present around the oesophagus.
 a) Supra-oesophageal ganglion b) Endocrine centre
 c) Sub-oesophageal ganglion d) Circum-oesophageal

733. Which substance secrete through Type II cells in alveoli?
a) Type I cells b) Type II cells c) Surfactant d) All of the above
734. The process of producing compost using earthworms is called _____.
a) Vermitech b) Vermiculture c) Vermicomposting d) Vermiwash
735. Which are excretory structures with special cells in the Amphioxus?
a) Flame cells b) Solenocytes c) Nematodes d) Insects
736. Sea anemone belongs to phylum
a) Protozoa b) Porifera c) Coelenterata d) Echinodermata
737. Which is contain in mucus membrane lining the airway?
a) Goblet cells b) Glycoprotein c) Epithelial cells d) All of the above
738. This is based on Electron Microscopy images to study the molecular structures of cell organelles.
a) Neo taxonomical tool b) Ethology of taxonomical tool
c) e - taxonomic resource d) All of the above
739. The openings between the foot processes of the podocytes are called _____.
a) Fenestrae b) Simple squamous epithelium
c) Podocytes d) Filtration slits
740. The medulla oblongata passes out through the _____.
a) Foramen magnum b) Spinal cord c) Cranial d) Spinal
741. Which have distinctly bilobed nucleus and the lobes are joined by thin strands?
a) Granulocyte b) Neutrophils c) Eosinophils d) Basophils
742. What is the middle layer, composed of smooth muscles and an extra cellular matrix which contains a protein, elastin?
a) Lymphocytes b) Tunica intima c) Tunica media d) Tunica externa
743. Malpighian tubules are the excretory structures in most _____.
a) Flame cells b) Solenocytes c) Nematodes d) Insects
744. What is feeling of nausea?
a) Vomiting b) Chewing c) Biting d) Swallowing
745. _____ are the main excretory organs of cockroach.
a) Ommatidia b) Mosaic vision c) Malpighian tubules d) Uricotelic
746. Actin has polypeptide subunit called _____.
a) F-actin
b) Andrew F. Huxley and Rolf Niedergerke
c) Contraction
d) Acetycholine
747. It is used to analyse difference in homologous DNA sequences that can be detected by the presence of fragments of different lengths after digestion of the DNA samples.
a) Restriction Fragment Length Polymorphisms (RFLP)
b) Polymerase Chain Reaction (PCR)
c) Both of these
d) None of the above
748. Which character is not included in Cnidarians?
a) Nutrition is holozoic and intracellular
b) Digestion is both extracellular and intracellular
c) The nervous system is primitive and is formed of diffused nerve net
d) Corals have a skeleton made up of calcium carbonate
749. Skeletal muscle is attached to the bone by a bundle of collagen fibres known as _____.
a) Mesoderm b) Myocytes c) Tendon d) Fascicle
750. In females, the 7th sternum is ____ shaped.
a) Metathorax b) Tergum c) Sternum d) Boat
751. _____ is muscle cell membrane capable of propagating action potentials.
a) Myoglobin b) Sarcolemma c) Sarcomere d) Ilium

752. _____ or water channels are formed by specific plasma membrane proteins in the tubular cells.
a) Aquaporins
b) Bowmans capsule hydrostatic pressure
c) Glomerular capillary pressure
d) Glomerulus
753. Which are of two types, lymphocytes and monocytes?
a) Agranulocytes
b) Lymphocyte
c) Monocytes
d) Platelets
754. The last segment of the leg - tarsus has five movable joints or _____.
a) Cervicum
b) Hexapoda
c) Tarsomeres
d) Tegmina
755. Which is characterized by narrowing and inflammation-of-bronchi?
a) Asthma
b) Emphysema
c) Pneumonia
d) Tuberculosis
756. Which character is not included in Mollusca?
a) Terrestrial or aquatic and exhibit organ system level of body organisation.
b) Bilaterally symmetrical (except univalves), triploblastic and coelomate
c) Body is covered by a calcareous shell and is unsegmented with a distinct head, muscular foot and a visceral hump or visceral mass
d) The adults are radially symmetrical but the larvae are bilaterally symmetrical
757. Which of the following is not involved in blood clotting?
a) Fibrin
b) Calcium
c) Platelets
d) Bilirubin
758. All living animals belonging to various phyla are included in the _____.
a) Order
b) Class
c) Phylum
d) Kingdom
759. The adipose tissue which contains abundant mitochondria is called _____.
a) Adipocytes
b) Adipose tissue
c) Brown fat
d) White fat
760. _____ is the seat of intelligence.
a) Cerebrum
b) Cerebral cortex
c) Corpus callosum
d) Association areas
761. _____ is a flat bone on the mid ventral line of the thorax
a) Hyoid bone
b) Foramen magnum
c) Atlas
d) Sternum
762. _____ are used to treat high blood pressure.
a) Osmoreceptors
b) ADH
c) Angiotensin Converting Enzyme inhibitors
d) Diabetes insipidus
763. Which of the following combinations are not matched?
Column I
Column II
a) Bilirubin and biliverdin (i) intestinal juice
b) Hydrolysis of starch (ii) Amylases
c) Digestion of fat (iii) Lipases
d) Salivary gland (iv) Parotid
764. _____ is associated only with the axon.
a) Myelin sheath
b) Synaptic knob
c) Neuro-muscular junction
d) Multipolar neurons
765. Sensory layer of eye is _____.
a) Retina
b) Canal of schlemm
c) Ciliary muscle
d) Accommodation
766. The _____ at the end of the growth phase - II taking 15 - 17 days to complete.
a) Juveniles
b) Non-clitellate
c) Clitellate
d) 60 days
767. Where does maximum absorption take place?
a) Stomach
b) Duodenum
c) Small intestine
d) Large intestine
768. _____ control involuntary functions of visceral organs.
a) Autonomic Nervous System
b) Brain
c) Prosencephalon
d) Telencephalon
769. _____ defect in the synthesis of collagen in the joints, heart valves.
a) Bone
b) Lacunae
c) Blood
d) Ehlers -Danlos syndrome
770. _____ is sensitive, red, to long wavelength close to 560 nm.

771. The neural system comprises of highly specialized cells called ____.
- a) Erythropsin b) Chloropsin c) Presbyopia d) Astigmatism
 a) Neurons b) Sensory functions
 c) Motor functions d) Autonomic functions
772. ____ at the base of the eyelashes are called ciliary glands
- a) Interoceptors b) Proprioceptors
 c) Sebaceous glands d) Lacrymal glands
773. Which is the character included in class Aves?
- a) They are homeothermic.
 b) Migration and parental care is well marked.
 c) Urinary bladder is absent
 d) All of the above
774. Which is made of special type of muscle in human heart?
- a) Raymond de viessens b) Cardiac muscle c) Papillary muscles d) 300g
775. Knee joint is an example of
- a. saddle joint b. hinge joint c. pivot joint d. gliding joint
776. How is the wall of the stomach lined by gastric glands?
- a) Chief cells b) Peptic cells c) Zymogen cells d) All of the above
777. ____ is an inborn reflex for an unconditioned stimulus.
- a) Unconditional reflex b) Conditioned reflex
 c) Pavlov d) Cerebral cortex
778. Which character is not included in Platyhelminthes?
- a) Development is indirect and includes a free swimming ciliated planula larva
 b) They have a dorsoventrally flattened body and hence called flatworms.
 c) Bilaterally symmetrical, triploblastic, acoelomate with organ system organisation
 d) They show moderate cephalization and unidirectional movement
779. The nutritive fluid is deposited in the ____ produced by the gland cells of the clitellum.
- a) Spermatophores b) Cocoons c) 2 - 3 weeks d) Direct
780. Which character is not included in Annelida?
- a) The circulatory system is of closed type with hemoglobin and chlorocruorin
 b) Nervous system consists of paired ganglion connected
 c) Shed off periodically by a process called moulting or ecdysis
 d) They reproduce sexually
781. They are capable of synthesizing their food without sunlight and oxygen by utilizing hydrogen sulphide and other chemicals from the volcanic vents.
- a) Archaea b) Bacteria c) Eukarya d) All of these
782. Cockroach excretes uric acid, so it is ____.
- a) Ommatidia b) Mosaic vision c) Malpighian tubules d) Uricotelic
783. ____ fibres are best suited for rapid, in-tense actions, such as short sprint at maximum speed.
- a) Slow - oxidative fibres b) Fast - oxidative fibres
 c) Fast - glycolytic fibres d) Hydrostatic skeleton
784. ____ cover the dry surface of the skin, the moist surface of buccal cavity.
- a) Exocrine glands b) Endocrine glands
 c) Compound epithelium d) Keratinized squamous epithelium type
785. The undigested solid waste passes out through the ____.
- a) Intestine b) Microvilli c) Rectum d) Cloaca
786. Malpighian tubules remove excretory products from
- a. mouth b. oesophagus c. haemolymph d. alimentary canal.
787. A pair of ____ is found on either side of the crop in the thorax.
- a) Salivary glands b) Trachea c) Stigmata d) Tracheoles

788. ___ is made of more than one layer of cells.
 a) Exocrine glands b) Endocrine glands
 c) Compound epithelium d) Keratinized squamous epithelium type
789. ___ are slightly movable joints in which the joint surfaces are separated by a cartilage.
 a) Lever system b) Motor neuron
 c) Fibrous joints or Synarthroses d) Cartilaginous joints or Amphiarthroses
790. Animal requiring minimum amount of water to produce urine are
 a. ureotelic b. ammonotelic C. uricotelic d. chemotelic
791. Which is the character not included in class Aves?
 a) Continuous with air sacs to supplement respiration
 b) In males, the testes are paired but in females, only the left ovary is well developed while the right ovary is atrophied
 c) Contains oviparous, fertilization is internal
 d) Presence of mammary glands
792. Which is an anticoagulant produced in small quantities by mast cells of connective tissue which prevents coagulation in small blood vessels?
 a) Serum b) Heparin c) Lymph d) Lymph nodes
793. The light I-bands of myofibril is called _____.
 a) Isotropic bands b) H-Zone c) M-line d) Z-disc
794. Presence of gills in the tadpole of frog indicates that
 a) fishes were amphibious in the past
 b) fishes involved from frog-like ancestors
 c) frogs will have gills in future
 d) frogs evolved from gilled ancestor
795. One or two interneurons may serve to transmit the impulses.
 a) Sensory Receptor b) Sensory Neuron c) Interneurons d) Motor Neuron
796. ___ is closely attached to skeletal bones.
 a) Biopsy b) Autopsy c) Skeletal muscle tissue d) Smooth muscle
797. The ___ communicates to the exterior through the dorsal pores.
 a) Dorsal pores b) Coelomic fluid
 c) Female genital aperture d) Male genital apertures
798. Which is regulating homeostatic mechanism?
 a) Cardio vascular system maintains blood flow b) Perfusion, to the heart and brain
 c) Both of these d) None of the above
799. The non-nervous special cells called
 a) Neuroglia b) Afferent neurons
 c) Efferent neurons d) Interneurons
800. The ___ has no valves.
 a) Lampito mauritii b) Paired valves c) Ventral vessel d) Lateral hearts
801. Asymmetrical structures called phallomeres or ___ which help in copulation.
 a) Malpighian tubules b) Mushroom shaped gland
 c) Seminal vesicles d) Gonapophyses
802. The Kingdoms defined by him were Monera, Protista, Fungi, Plantae, and Animalia.
 a) R.H. Whittaker b) Carl Woese c) Both of these d) None of the above
803. The word taxonomy was coined by _____.
 a) Carolus Linnaeus b) Aristotle
 c) Augustin Pyramus de Candole d) Charles Darwin
804. Animals that excrete most of its nitrogen in the form of ammonia are called
 a) Excretory system b) Ammonia c) Ammonoteles d) Uricoteles

805. *is a response to a stimulus that has been acquired by learning.*
 a) Unconditional reflex b) Conditioned reflex
 c) Pavlov d) Cerebral cortex
806. *The parts starting from the alveoli and the ducts constitute the_____.*
 a) Conducting zone b) Respiratory zone
 c) Both of these d) None of the above
807. *Find odd one out - Asymmetrical.*
 a) They do not displaysymmetry
 b) Any plane passing through the central axis of the body divides an organism into two identical parts
 c) Such animals lack a definite body plan or are irregular shaped
 d) Any plane passing through the centre of the body does not divide them into two equal halves
808. *Synovial fluid is found in*
 a. Ventricles of the brain b. Spinal cord
 c. immovable joint d. freely movable joints.
809. *How is respiration found in insects?*
 a) Moist skin b) Tracheal tubes c) Gills d) Vascularized lungs
810. *Which is circular folds in the lumen of ileum?*
 a) Taeniae coli b) Valves of kerkring c) Whartons duct d) succusertericus
811. *_____degenerative disorder of the nervous system.*
 a) Cardiac muscle tissue b) Parkinsons disease
 c) Alzheimers disease d) Nervous tissue
812. *Which spherical water soluble droplets offat soluble vitamins are first incorporated?*
 a) Mycelium b) Micelles c) Hyphae d) All of the above
813. *How do bolus passed into the pharynx and then into the oesophagus?*
 a) Swallowing b) Deglutition c) Both of these d) None of the above
814. *Which is the most common circulatory disease?*
 a) Systemic circulation b) Pulmonary circulation
 c) Vagus nerve d) Hypertension
815. *_____is a degenerative disease that damages the joints.*
 a) Atrophy b) Muscle pull c) Arthritis d) Osteoarthritis
816. *_____found around the pharynx, male urethra and lining of some glandular ducts.*
 a) Non keratinizedsquamous epithelium type
 b) Stratified cuboidal epithelium
 c) Stratified columnar epithelium
 d) Transitional Epithelium
817. *Which is the pressure exerted by the fluid in the Bowmans capsule?*
 a) Aquaporins b) Bowmans capsule hydrostatic pressure
 c) Glomerular capillary pressure d) Glomerulus
818. *Which type of muscle is on the walls of the ventricles which thicker than the auricles?*
 a) Raymond de viessens b) Cardiac muscle c) Papillary muscles d)
- 300g
819. *Functioning of facial parts is .*
 a) Trigeminal nerve b) Trochlear nerve c) Vagus d) Hypoglossal
820. *_____diffuses through the skin into the blood of earthworm.*
 a) Intestinal caecae b) Vermicasts c) Respiratory organs d) Oxygen
821. *Which have large round nucleus and small amount of cytoplasm?*
 a) Agranulocytes b) Lymphocyte c) Monocytes d) Platelets
822. *The prokaryotes which have the ability to grow in extreme conditions like volcano vents,*

hot springs and polar ice caps, hence are also called.

- a) Extremophiles b) Halophiles c) Thermoacidophiles d) All of the above
823. Match column I with column II and choose the correct option Column
- I Column - II
(P) Small intestine (i) 23 cm
(Q) Large intestine (ii) 4meter
(R) Oesophagus (iii) 12.5 cm
(S) Pharynx (iv) 1.5 meter
a. (P-iv) (Q-ii) (R-i) (S-iii) b. (P-ii) (Q-iv) (R-i) (S-iii)
c. (P-i) (Q-iii) (R-ii) (S-iv) d. (P-iii) (Q-i) (R-ii) (S-iv)
824. Which character is not included in Mollusca?
a) Digestive system is complete and mouth contains a rasping organ called radula
b) The most distinctive feature of the presence of the water vascular system
c) The sense organs are tentacles, eyes and ospharidium
d) Excretory organs are nephridia
825. Which is single large artery carrying blood away from the left ventricle?
a) Aorta b) Chordate tendineae c) Lub sound d) Dub sound
826. Fibres that contain numerous mitochondria and have a high capacity for oxidative phosphorylation are classified as _____.
a) isotonic contraction b) Isometric contraction
c) Myosin d) Oxidative fibres
827. _____ immune cells derived from monocytes.
a) Acinus b) Collagen c) Lacunae d) Macrophages
828. Which does stimulate the bone marrow to produce more RBCs?
a) Erythrocyte b) Leucocyte c) Erythropoietin d) Thrombocyte
829. _____ exhibits a closed type of blood vascular system.
a) Lampito mauritii b) Paired valves
c) Ventral vessel d) Lateral hearts
830. Branched tubes known as _____.
a) Salivary glands b) Trachea c) Stigmata d) Tracheoles
831. The caloric value of protein is
a) 4.1 b) 9.45 c) 5.65 d) 9.1
832. Which is a protein (D antigen) present on the surface of the red blood cells in majority (80%) of humans?
a) A group b) B group c) O group d) Rh factor
833. What will happen if the stretch receptors of the urinary bladder wall are totally removed?
a. Micturition will continue
b. Urine will be continue to collect normally in the bladder
c. there will be no micturition
d. urine will not collection the bladder
834. Additional volume of air a person can inspire by forceful inspiration is called .
a) Tidal Volume (TV) b) Inspiratory Reserve Volume (IRV)
c) Expiratory Reserve Volume (ERV) d) Residual Volume (RV)
835. The _____ animals can tolerate only narrow fluctuations in the salt concentration.
a) Osmotic homeostasis b) Osmoregulators c) Stenohaline d) Euryhaline
836. What is the inflammation of the vermiform appendix?
a) Peptic ulcer b) Appendicitis c) Hiatus hernia d) Diarrhoea
837. What is the daily secretion of saliva from salivary glands? a) 1000 to 1100ml b) 1000 to 1300ml
c) 1000 to 1500ml d) 1000 to 1700ml
838. What can cause any alteration in the composition of the bile?

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- a) Vomiting b) Jaundice c) Liver cirrhosis d) Gall stones
839. It is movement takes place along the joints which act as fulcrum of the lever.
a) Lever system
b) Motor neuron
c) Fibrous joints or Synarthroses
d) Cartilaginous joints or Amphiarthroses
840. The nitrogenous waste formed as a result of breakdown of amino acids is converted to urea in the liver by the _____.
a) Vasa recta b) Cortical nephrons
c) Ornithine cycle d) Glomerular filtration
841. The brain is mainly a sensory and an _____.
a) Supra-oesophageal ganglion b) Endocrine centre
c) Sub-oesophageal ganglion d) Circum-oesophageal
842. Which has to be reabsorbed by the renal tubules as it contains certain substances needed by the body?
a) 1.5 L per day b) Selective reabsorption c) Collecting duct d) Aquaporins
843. Which is the pressure in the arteries as the chambers of the heart contracts?
a) Ventricular diastole b) Cardiac output
c) Systolic pressure d) Diastolic pressure
844. Early classification of organisms were based on _____ animals.
a) Beneficial b) Harmful c) Beneficial or harmful d) All of these
845. The clitellum is a distinct part in the body of earthworm *Lampito mauritii*, it is found in?
a) Segments 13 - 14 b) Segments 14 - 17
c) Segments 12 - 13 d) Segments 14 - 16
846. _____ is the part of the brain between the spinal cord and the diencephalon.
a) Emotional brain b) Brain stem c) Mid brain d) Corpora quadrigemina
847. The mouth remains permanently closed while the nostrils remain open _____.
a) Cutaneous respiration b) Diffusion
c) Buccal respiration d) Pulmonary respiration
848. Each myosin molecule is made up of a monomer called _____.
a) Sarcomere b) Actin c) Meromyosin d) G-actin
849. Find odd one out - Mesoderm.
a) Nail b) Muscle c) Bone d) Heart
850. Which of the following substances in to-bacco smoke damage the gas exchange system?
a. carbon monoxide and carcinogens b. carbon monoxide and nicotine
c. carcinogens and tar d. nicotine and tar
851. The sclerites of lateral sides are called _____.
a) Sclerites b) Tergites c) Sternites d) Pleurites
852. All agglutinogens contain _____.
a) Sucrose, D-galactose b) N-acetyl glucosamine
c) 11 terminal amino acids d) All of the above
853. Which of the following is a crustacean?
a) Prawn b) Snail c) Sea anemone d) Hydra
854. Granulated endoplasmic reticulum of a neuron is called _____.
a) Neurilemma b) Dendrites
c) Nissls granules d) Axon hillock
855. What is the process of the absorbed substances becoming components of cells?

- a) Ingestion b) Digestion c) Absorption d) Assimilation
856. ___ is found lining the ureters, urinary bladder and part of the urethra.
a) Non keratinized squamous epithelium type
b) Stratified cuboidal epithelium
c) Stratified columnar epithelium
d) Transitional Epithelium
857. ___ are located at or near the surface of the body.
a) Preganglionic neuron b) Autonomic ganglion
c) Postganglionic neuron d) Exteroceptors
858. What does form two sets of teeth during their life time?
a) Thecodont b) Diphyodont c) Heterodont d) Homodont
859. Which does separate lobes of liver connect the liver with diaphragm
a) Ampulla of Vater b) Bartholins duct
c) Crypts of leiberkuhn d) Falciform ligament
860. "Origin of Species" book was written by _____.
a) Aristotle b) John Ray c) Carolus Linnaeus d) Charles Darwin
861. The ___ is colourless.
a) Spiracular muscles b) Spiracles c) Open type d) Haemolymph
862. Which does the process help in differentiation of stem cells of the bone marrow to erythrocytes in adults?
a) Erythropoietin b) Erythropoiesis c) Haematocrit d) Granulocyte
863. ___ opens into the anterior part of the ejaculatory duct.
a) Malpighian tubules b) Mushroom shaped gland
c) Seminal vesicles d) Gonapophyses
864. The dorsal wall of the intestine is folded into the cavity as the _____.
a) Hydrostatic skeleton b) Kalinc) Intestine d) Typhlosole
865. The ___ lies on the ventral side in the 14th segment.
a) Dorsal pores b) Coelomic fluid
c) Female genital aperture d) Male genital apertures
866. It is an advantageous type of symmetry in triploblastic animals, which helps in ____ more efficiently.
a) seeking food b) locating mates
c) escaping from predators d) all of the above
867. ATPase enzyme needed for muscle contraction is located in
a. actinin b. troponin c. myosin d. actin
868. Which are phagocytic cells that are similar to mast cells and have kidney shaped nucleus?
a) Agranulocytes b) Lymphocyte c) Monocytes d) Platelets
869. Name the build-up of atheroma contain cholesterol, fibres, dead muscle and platelets?
a) Coronary heart disease b) Atherosclerosis c) Thrombus d) Stroke
870. Of the new animal species discovered in India, are invertebrates and vertebrates.
a) 258 and 55 b) 158 and 45 c) 358 and 85 d) 200 and 25
871. ___ is present in thick filaments of muscles.
a) Isotonic contraction b) Isometric contraction
c) Myosin d) Oxidative fibres
872. Which is prolonged inspiration due to increase in CO₂ concentration?
a) Hypoxia b) Pneumothorax c) Vocal cords d) Yawning
873. An unconscious patient is rushed into the emergency room and needs a fast blood transfusion. Because there is no time to check her medical history or determine her blood type, which type of blood should you as her doctor, give her?
a) A- b) AB c) O+ d) O-
874. Each branch at the distal end of the axon terminates into a bulb like structure ____.

- a) Myelin sheath b) Synaptic knob
c) Neuro-muscular junction d) Multipolar neurons
875. Which is the electrical potential difference across the plasma membrane of a resting neuron?
a) Bipolar neurons b) Unipolar neurons
c) Intracellular fluid d) Resting membrane Potential
876. _____ is commonly found in Tamil Nadu.
a) Endogeics b) Lampito mauritii c) Porphyrin d) Metameres
877. What is the function of lymph?
a) Transport of O₂ into brain c) Bring interstitial fluid in blood
b) Transport of CO₂ into lungs d) Bring RBC and WBC in lymph node
878. Which is devoid of photo receptors?
a) Fovea centralis b) Blind spot c) Myopia d) Hypermetropia
879. Name the organization found in sponges.
a) Acellular level b) Cellular level c) Tissue level d) Organ level
880. _____ is a post-mortem dissection of a dead body.
a) Biopsy b) Autopsy c) Skeletal muscle tissue d) Smooth muscle
881. The male frog has a copulatory or _____ on the ventral side.
a) Hind limbs b) Vocal sacs c) Nuptial pad d) Muscular sticky tongue
882. A person who is on a long hunger strike and is surviving only on water, will have
a. Less amino acids in his urine b. Macula densa cells
c. Less urea in his urine d. More sodium in his urine
883. The voltage-gated Na⁺ and K⁺ channels are concentrated at the
a) Repolarisation b) Hyperpolarization c) Lazy gates d) Nodes of Ranvier
884. _____ is the science of arrangement of living organisms.
a) Taxonomy b) Classification c) Nomenclature d) Identification
885. The increase in blood nitrogen content can lead to a condition called _____.
a) Nitrogen narcosis b) Oxyhaemoglobin
c) Haemoglobin d) All of the above
886. Marcello Malpighi described _____ as vasa varicose.
a) Malpighian tubules b) Mushroom shaped gland
c) Seminal vesicles d) Gonapophyses
887. _____ common opening for the digestive, excretory and reproductive systems.
a) Nictitating membrane b) Tympanic membranes
c) Cloacal aperture d) Fore limbs
888. How is hepatic lobe covered by a thin connective tissue sheath?
a) Malpighians capsule b) Glissons capsule
c) Cystic duct d) Sphincter of Oddi
889. _____ produces heat by non-shivering thermogenesis in neonates.
a) Adipocytes b) Adipose tissue c) Brown fat d) White fat
890. The receptors for taste and smell are the _____.
a) Sensory-neural deafness b) Otoliths
c) Crista ampullaris d) Chemoreceptors
891. Find odd one out - Which one is not found in organ level of organization?
a) Flatworms, nematodes, b) Annelids, arthropods,
c) Molluscs, echinoderms d) Sponges, chordates.
892. The first seven pairs of ribs are called true ribs or _____.
a) Vertebro-sternal ribs b) Vertebro-chondral ribs
c) Vertebral ribs d) Acromion
893. 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
894. In which of the following phyla, the adult shows radial symmetry but the larva shows bilateral symmetry?
a) Mollusca b) Echinodermata c) Arthropoda d) Annelida
895. Kidney of frog is
a) Archinephros b) Mesonephros c) Pronephros d) Metanephros
896. During aestivation and hibernation ____ takes place through skin.
a) Gaseous exchange b) Pericardium
c) Sinus venosus d) Truncus arteriosus
897. The ascending limb continues as a highly coiled tubular region in nephron is called the _____.
a) Distal convoluted tubule b) Collecting duct
c) Juxtamedullary nephrons d) Glomerulus
898. Arteries do not always branch into arterioles, they can also form _____.
a) Arteries b) KiloPascal (KPa) c) Small sphincter d) Anastomoses
899. The main function of the cuboidal epithelium is
a) Protection b) Secretion c) Absorption d) Both (b) and (c)
900. Numerous _____ have made tremendous contribution and documentation in the observation and study of even minute characters in living organisms.
a) scientists b) taxonomists c) both of these d) none of these
901. How long food remain in the stomach?
a) 2 to 3 hours b) 4 to 5 hours c) 3 to 4 hours d) 5 to 6 hours
902. In which the atria contracts while the ventricles are still relaxed?
a) Tachycardia b) Bradycardia c) Ventricular diastole d) Atrial systole
903. Which is the middle layer of heart wall?
a) Epicardium b) Myocardium c) Endocardium d) Pericardial space
904. The junction between the motor neuron and the sarcolemma of the muscle fibre is called the _____.
a) Adenosine triphosphate b) Neuromuscular junction
c) Skeletal Muscle Glycogen Analysis d) 5000 glucose units
905. The dark A-bands of myofibril is called _____.
a) Sarcoplasm b) Myoglobin c) Glycosomes d) Anisotropic bands
906. _____ forms an internal framework, stroma.
a) Reticular connective tissue
b) Dense connective tissues
c) Dense regular connective tissues
d) Dense irregular connective tissues
907. _____ supply blood to the posterior part of the body.
a) Systemic trunk b) Pulmo-cutaneous trunk c) Carotid d) Blood
908. _____ is the main tissue that provides structural frame to the body.
a) Bone b) Lacunae c) Blood d) Ehlers -Danlos syndrome
909. _____ are located in the visceral organs and blood vessels.
a) Interoceptors b) Proprioceptors
c) Sebaceous glands d) Lacrymal glands
910. Historia Animalium was written by _____.
a) Carolus Linnaeus b) Aristotle
c) Augustin Pyramus de Candolle d) Charles Darwin
911. Name the folds found in the inner wall of stomach which unfolds to accommodate a large meal.
a) Roughage b) Gastric rugae c) Both of these d) None of the above
912. _____ means tongue.

913. a) Hypognathous b) Orthopterus c) Hypopharynx d) Prothoracic
Which is an intrinsic factor responsible for the absorption of Vitamin B12?
914. a) Parietal b) Oxyntic c) Castles d) Zymogen
Depending on the presence or absence of ___ on the RBCs, blood group in individual belongs to four different types namely, A, B, AB and O.
915. a) Surface antigens b) Natural antibodies c) Agglutinins d) Glycosyltransferase
___ means neck.
916. a) Cervicum b) Hexapoda c) Tarsomeres d) Tegmina
Which is the fluid pressure exerted by the blood within the glomerular capillaries?
917. a) Aquaporins b) Bowmans capsule hydrostatic pressure
c) Glomerular capillary pressure d) Glomerulus
Different kinds of tissues aggregate to form an organ to perform a specific function in__.
918. a) Acellular level of Organisation b) Cellular level of Organisation
c) Tissue level of Organisation d) Organ level of Organisation
Which of the following statements is wrong regarding conduction of nerve impulse?
919. a. In a resting neuron, the axonal membrane is more permeable to K^+ ions and nearly impermeable to Na^+ ions.
b. Fluid outside the axon has a high concentration of Na^+ ions and low concentration of K^+ , in a resting neuron.
c. Ionic gradients are maintained by Na^+ - K^+ pumps across the resting membrane, which transport 3 Na^+ ions outwards for 2 K^+ into the cell.
d. A neuron is polarized only when the outer surface of the axonal membrane possess a negative a charge and its inner surface is positively charged.
It transmits impulse from CNS to the effector organ.
920. a) Sensory Receptor b) Sensory Neuron
c) Interneurons d) Motor Neuron
What is the technical term to mineral salts like calcium and magnesium deposited and form a hard layer on the teeth?
921. a) Tartar, calculus, plaque b) Efflorescence
c) Both of these d) None of these
How is respiration found in fishes?
922. a) Moist skin b) Tracheal tubes c) Gills d) Vascularized lungs
What happens due to cigarette smoking?
923. a) about 80% of the lung cancer b) Cardio vascular system
c) Nicotine d) All of the above
___ are about 100-150 in number and are present in 6-9 bundles.
924. a) Malpighian tubules b) Mushroom shaped gland
c) Seminal vesicles d) Gonapophyses
Which is a character of Hemichordata?
925. a) They are ciliary feeders
b) Their circulatory system is simple and with a dorsal heart
c) Respiration is through paired gill slits opening into the pharynx
d) All of the above
Additional volume of air a person can forcefully exhale by forceful expiration is called ___.
926. a) Tidal Volume (TV) b) Inspiratory Reserve Volume (IRV)
c) Expiratory Reserve Volume (ERV) d) Residual Volume (RV)
What is the technical term of tooth embedded in a socket in the jaw bone?
927. a) Thecodont b) Diphyodont c) Heterodont d) Homodont
The Tidal Volume of a normal person is

- a. 800 mL b. 1200 mL c. 500 mL d. 1100 - 1200 mL
928. Which glands secrete mucus and enzymes in the wall of the duodenum?
 a) Gastric glands b) Duodenal glands
 c) Pyloric glands d) Brunners glands
929. Which is a condition when the blood vessels in the brain bursts?
 a) Coronary heart disease b) Atherosclerosis c) Thrombus d) Stroke
930. _____ acts at different sites such as heart, kidney, brain, adrenal cortex and blood vessels.
 a) Diabetes insipidus b) Angiotension I
 c) Angiotension II d) Renin- Angiotensin- Aldosterone System
931. The vesicles release their neurotransmitters into the synaptic cleft by
 a) Pre-synaptic neuron b) Cleft c) Exocytosis d) Brain
932. How does bolus further pass down through the oesophagus to the stomach by successive waves of muscular contraction?
 a) Swallowing b) Deglutition c) Peristalsis d) All of the above
933. Which is made up of thin squamous epithelium with some connective tissues?
 a) Serosa b) Muscularis c) Submucosa d) Mucosa
934. Which are non-phagocytic and constitute about 2-3% of the total WBCs?
 a) Granulocyte b) Neutrophils c) Eosinophils d) Basophils
935. Each dark band has a lighter region in its middle called the _____.
 a) Isotropic bands b) H-Zone c) M-line d) Z-disc
936. _____ considered species as the basic unit of classification.
 a) Origin of Species b) Systema naturae
 c) Historia Generalis Plantarum d) Tautonymy
937. These are places where wild animals are kept in protected environments under human care.
 a) Taxonomical keys b) Museums c) Zoological parks d) Marine parks
938. Which is the rhythmic peristaltic movement churns and mixes the food with gastric juice and make it into a creamy liquid?
 a) Chyme b) Bolus c) Both of these d) None of the above
939. What is the common duct called hepato-pancreatic duct?
 a) Ampulla of Vater b) Bartholins duct
 c) Crypts of leiberkuhn d) Falciform ligament
940. The cranial bones form the hard protective outer covering of the brain and called the
 a) Exoskeleton b) Endoskeleton c) Brain box d) External auditory meatus
941. An adult human on an average excretes _____ of urine per day.
 a) Counter current multiplier b) Atrial Natriuretic Peptide or factor
 c) Micturition d) 1 to 1.5L
942. _____ is consisting of cluster of cells.
 a) Pseudo-stratified epithelial b) Glandular epithelium
 c) Goblet cells d) Salivary gland
943. Which is Chronic Obstructive Lung Disease?
 a) Apnoea b) Book gills c) Book lungs d) COLD
944. The cocoons have an incubation period of about 14- 18 days after they hatch to _____.
 a) Juveniles b) Non-clitellate c) Clitellate d) 60 days
945. The average blood volume is about
 a) 5000ml b) 5500ml c) 6000ml d) 6500ml
946. The head of femur articulates with the _____ of the pelvis to form the hip joint.
 a) Ischium b) Acetabulum c) Tarsus d) Metatarsus
947. The synthesis of surfactants begins only after the _____ of gestation.
 a) 20th week b) 25th week c) 30th week d) 35th week

948. Which have thinner walls and a larger lumen and hence can be easily stretched?
 a) Capillaries b) Veins c) Coronary artery d) Open circulatory system
949. This domain includes single celled organisms
 a) Archaea b) Bacteria c) Eukarya d) All of these
950. Common oviduct known as ____, which opens into the genital chamber.
 a) Ovarioles b) Vagina c) Ootheca d) Paurometabolus
951. Name the enzyme RBCs contain a high concentration.
 a) Carbon dioxide b) Carbon monoxide
 c) Carbonic anhydrase d) Carbonic amylase
952. A pair of ____ forms the ear drum behind the eyes.
 a) Nictitating membrane b) Tympanic membranes
 c) Cloacal aperture d) Fore limbs
953. ____ secretes the protective lubricating mucus.
 a) Microvilli b) Goblet cell
 c) Ciliated epithelium d) Nonciliated epithelium type
954. The action potential reaches a certain level, called ____.
 a) Sodium-Potassium pump b) Depolarization
 c) Threshold potential d) All or none principle
955. ____ have myosin ATPase activity but cannot make as much ATP as oxidative fibres, because their source of ATP is glycolysis.
 a) Slow - oxidative fibres b) Fast - oxidative fibres
 c) Fast - glycolytic fibres d) Hydrostatic skeleton
956. ____ in the gastric glands secrete gastric enzymes and Goblet cells secrete mucus
 a) Chief cells b) Peptic cells c) Zymogen cells d) All of the above
957. Few organisms live in salty environments.
 a) Extremophiles b) Halophiles c) Thermoacidophiles d) All of the above
958. Find odd one out - Cyclostomata
 a) Shark b) Sting ray c) Lamprey d) Saw fish
959. Inflammation of joints due to accumulation of uric acid crystals is called as
 a. Gout b. myasthenia gravis c. osteoporosis d. osteomalacia
960. The vasa recta, maintains the medullary osmotic gradient via ____ by passive transport.
 a) Tubular secretion b) Osmolarity
 c) Countercurrent exchanger d) Hypothalamus

961. Who coined the term biodiversity?
a) Walter Rosen b) AG Tansley c) Aristotle d) AP de Candole
962. Which is intestinal juice?
a) Sphincter of boydon b) Sphincter of oddi
c) Stensons duct d) Succusertericus
963. Which is a red- coloured respiratory pigment of the muscle fibre?
a) Sarcoplasm b) Myoglobin c) Glycosomes d) Anisotropicbands
964. ___indicates categories at different levels, for example Kingdom Animalia, includes multicellular animals such as reptiles,mammals, etc.
a) Taxa b) Class c) Species d) Phylum
965. The protein present in the thin filament is
a. myosin b. actin c. pectin d. leucin
966. The bilobed mass of nervoustissue called___.
a) Supra - pharyngeal ganglia b) Tufted nephridia
c) Integumentary nephridia d) Septal nephridia
967. The body setae of earthworm arises from a___of the skin.
a) Setigerous sac b) Pre clitellar c) Clitellar d) Post - clitellar
968. Which can be heard the two sounds during each cardiac cycle?
a) Bundle of His b) Purkinje fibres c) Pacemaker d) Stethoscope
969. In addition___are also present as two groups.
a) Maxillaryteeth b) Vomerine teeth c) Lower jaw d) Oesophagus
970. Which does secrete HCl?
a) Chief cells b) Peptic cells c) Zymogen cells d) Parietal cells
971. Name Along with villi, the ileal mucosa also contain mucus secreting goblet cells and lymphoid tissue which produce lymphocytes
a) Peyers patches b) Crypts of Leiberkuhn
c) Vermiform appendix d) Haustra
972. ___contains fibroblasts, macrophages, and mast cells.
a) Specialized connective tissues b) Areolar connective tissue
c) Tissue fluid d) Adipose tissue
973. Which of the following does not have an open circulatory system?
a) Frog b) Earthworm c) Pigeon d) Cockroach
974. If two or more organs perform common physical and chemical functions___.
a) Tissues b) Organs c) Living fabrics d) Organ systems
975. Tissues are organized in specific proportions and patterns to form___.
a) Tissues b) Organs c) Living fabrics d) Organ systems
976. ___resembles areolar connective tissue, but, the matrix is filled with fibroblasts.
a) Reticular connective tissue
b) Dense connective tissues
c) Dense regular connective tissues
d) Dense irregular connective tissues
977. The sphincter of Oddiguards
a) Hepatopancreatic duct b) Common bile duct
c) Pancreatic duct d) Cystic duct
978. Progressive inability to secrete saliva and tears___.
a) Stickler syndrome b) Rhabdomyosarcoma
c) Rheumatoid arthritis d) Sjogrens syndrome
979. Why is the velocity of blood flow the lowest in the capillaries?
a) The systemic capillaries are supplied by the left ventricle, which has a lower cardiac output than theright ventricle.
b) Capillaries are far from the heart, and blood flow slows as distance from the heart i ncreases.

- c) They have the total surface area of the arterioles.
 d) The capillary walls are not thin enough to allow oxygen to exchange with the cells.
 e) The diastolic blood pressure is too low to deliver blood to the capillaries at a high flow rate.
980. How does the small intestine assist in the final process of food?
 a) Digestion b) Absorption c) Both of these d) None of the above
981. Name the process of absorption of micro molecules into the blood stream.
 a) Ingestion b) Digestion c) Absorption d) Assimilation
982. _____ carry with them harmful germs of various bacterial diseases.
 a) Fishing b) Cockroach c) Cursorial d) Vectors
983. The _____ trunk supplies blood to the anterior region of the body.
 a) Systemic trunk b) Pulmo-cutaneous trunk c) Carotid d) Blood
984. Partially digested food called _____ is passed from the stomach.
 a) Liver b) Bilobed c) Hydrochloric acid d) Chyme
985. _____ is due to the rough (irregular) curvature of cornea or lens.
 a) Erythropsin b) Chloropsin c) Presbyopia d) Astigmatism
986. Which cells exhibit amoeboid movement for engulfing pathogens?
 a) Macrophages b) Ciliary movement
 c) Flagellar movement d) Muscular movement
987. Several statements are given here in reference to cone cells which of the following option indicates all correct statements for cone cells?
 Statements
 (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 fovea of retina
 a. (iii), (ii) and (i) b. (ii), (iii) and (iv)
 c. (i), (iii) and (iv) d. (i), (ii) and (iv)
988. _____ affects collagen and results in facial abnormalities.
 a) Stickler syndrome b) Rhabdomyosarcoma
 c) Rheumatoid arthritis d) Sjogrens syndrome
989. _____ the defect may be in the organ of Corti.
 a) Sensory-neural deafness b) Otoliths
 c) Crista ampullaris d) Chemoreceptors
990. _____ is the second largest part of the brain.
 a) Rhombencephalon b) Cerebellum
 c) Pons varoli d) Medulla oblongata
991. Which is the character not included in class Mammalia?
 a) A neurotoxin called Homobatrachotoxin is found in its skin and feathers, causes numbness and tingling
 b) Their body is covered by hair, a unique feature
 c) Some of them are adapted to fly or live in water
 d) Presence of mammary glands
992. Which is recorded the changes in electrical potential across the heart during one cardiac cycle?
 a) Electrocardiogram b) Sinu Auricular node c) P wave d) T wave
993. Find odd one out - Large intestine is involved in absorption of more amounts of _____.
 a) Water b) Minerals and certain drugs
 c) Alcohol and medicines d) Vitamins
994. Which is the character of tidal volume?
 a) It is approximately 500ml

- b) C ng vigorous exercise, is about 4-10 times higher
 a d) All of the above
995. _____ is a process by which things are grouped in convenient categories, based on easily observable characters.
 i a) Taxonomy b) Classification c) Nomenclature d) Identification
996. Which mechanism of digestion starts in the mouth?
 s a) Grinding b) Chewing c) Mastication d) All of the above
997. Which is chronic disease of liver results in degeneration and destruction of liver cells?
 i a) Vomiting b) Jaundice c) Liver cirrhosis d) Gall stones
1000. Which is the primary function of the respiratory system?
 o a) To exchange O_2 and CO_2 between the atmosphere and the blood
 r b) To maintain homeostatic regulation of body pH
 r c) To protect us from inhaled pathogens and pollutants
 d) All of the above
1001. Which increases the glomerular blood pressure and glomerular filtration rate?
 x a) Diabetes insipidus b) Angiotension I
 p c) Angiotension II d) Renin- Angiotensin- Aldosterone System
1002. Which character is not included in Ctenophora?
 r a) They have eight external rows of ciliated comb plates
 e b) The polyp represents the asexual generation and medusa the sexual generation
 a c) Bioluminescence is well marked
 p d) They lack nematocysts but possess special cells called lasso cells or colloblasts
1003. The animals are able to tolerate wide fluctuations in the salt concentrations
 r a) Osmotic homeostasis b) Osmoregulators c) Stenohaline d) Euryhaline
1004. _____ is a standard method to measure muscle glycogen.
 x a) Adenosine triphosphate b) Neuromuscular junction
 i c) Skeletal Muscle Glycogen Analysis d) 5000 glucose units
1005. The sense of taste is considered to be the most pleasurable of all senses.
 a _____
 t a) Gustatory receptor b) Papillae c) Gustatory hairs d) Skin
1006. The _____ is a heavy structure specialized for weight bearing.
 e a) Humerus b) Glenoid cavity c) Olecranon process d) Pelvic
 y girdle
1007. The largest order _____, which includes the frogs and toads.
 o a) Rana hexadactyla b) Amphibian c) Anura d) Poikilothermic
1008. _____ help to stretch body muscles for more freedom of joint movements.
 o a) Muscle pull b) Myasthenia gravis
 o c) Flexibility exercises d) Myasthenia gravis
1009. _____ are classified as cartilage, bones and blood.
 o a) Elastic connective tissue b) Specialised connective tissues
 c) Cartilages d) Bones
1010. Earthworms have their most important organ in the first _____.
 o a) 20 segments b) Regenerate c) Oviducts d) Spermathecae
1011. Which is a hormone secreted by the kidneys in response to low oxygen?
 o a) Erythropoietin b) Erythropoiesis c) Haematocrit d) Granulocyte
1012. _____ movement of hands, legs, jaws, tongue are caused by the contraction and relaxation of the muscle.
 l a) Macrophages b) Ciliary movement
 c) D c) Flagellar movement d) Muscular movement
1013. Which is longitudinal muscular chords in the colon?
 i a) Taeniae coli b) Valves of kerkring c) Whartons duct d)

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- cts d) Spermathecae
1015. ___ is inflammation of joints due to accumulation of uric acid crystals.
a) Rheumatoid arthritis b) Gouty arthritis or gout
c) Osteoporosis d) Endurance
1016. What is called anal column get enlarged?
a) Piles b) Haemorrhoids c) Both of these d) None of the above
1017. What is the role of bile?
a) Emulsification of fats b) Digestion of lipids
c) Both of these d) None of the above
1018. Which type of movement occurs in the cells which are having flagella or whip-like motile organelle?
a) Macrophages b) Ciliary movement
c) Flagellar movement d) Muscular movement
1019. ___ are three pairs lying in segments 7th, 8th and 9th, opening.
a) ___ that forms a structural gap and a functional bridge between neurons.
a) Pre-synaptic neuron b) Cleft c) Exocytosis d) Brain
1020. The dorsal vessel is connected with the ventral vessel by eight pairs of ____.
a) Lampito mauritii b) Paired valves c) Ventral vessel d) Lateral hearts
1021. "Historia Generalis Plantarum" book was written by ____.
a) Aristotle b) John Ray c) Carolus Linnaeus d) Charles Darwin
1022. Sexually, earthworms are
a) Sexes are separate b) Hermaphroditic but not self-fertilizing
c) Hermaphroditic and self-fertilizing d) Parthenogenic
1023. ___ is the sensory organ of touch.
a) Gustatory receptor b) Papillae c) Gustatory hairs d) Skin
1024. ___ a viviparous cockroach.
a) Moulting b) Allergen c) Diploptera punctata d) Super food
1025. Which is iron containing red pigment of RBCs of vertebrates, gives red colour to blood?
a) Dyspnoea b) Epiglottis c) Haemoglobin d) Herring-Breuer reflex
1026. ___ do not have ducts.
a) Exocrine glands b) Endocrine glands
c) Compound epithelium d) Keratinized squamous epithelium type
1027. The oxidative fibres are termed as ____.
a) Red muscle fibres b) Glycolytic fibres
c) White muscle fibres d) Cartilage
1028. ___ is a narrow, thin transverse band followed by medulla oblongata.
a) Olfactory ventricle b) Optic ventricles
c) Rhombencephalon d) Cerebellum
1029. Sponges exhibit cellular level of organization. Because,
a) Arranged as loose aggregates and form tissues
b) Arranged as loose aggregates and do not form tissues
c) Arranged as loose aggregates and form cells
d) All of the above
1030. Which is the outer layer of heart wall?
a) Epicardium b) Myocardium c) Endocardium d) Pericardial space
1031. "Systema naturae" book was written by ____.

- a s Darwin
) 1032. Find odd one out - Radial symmetry.
 a) Paired body parts that are arranged on either side of a plane passing through the central axis
 A b) When any plane passing through the central axis of the body divides an organism into two identical parts
 r c) Animals have a top and bottom side but no dorsal and ventral, no right and left side
 i d) An asymmetrical body plan is also seen in adult gastropods
 s 1033. Which is damaged by carbon monoxide and nicotine?
 t a) about 80% of the lung cancer b) Cardio vascular system
 o c) Nicotine d) All of the above
 t 1034. Common Indian green frog scientific name is _____.
 l a) Rana hexadactyla b) Amphibian c) Anura d) Poikilothermic
 e) 1035. Which method of exchange of gases takes place in sponges, coelenterates and flatworms?
 J a) Diffusion b) Simple diffusion c) Passive transport
 o d) Active transport
 h 1036. ____ functions to provide names for all taxa at all levels in the hierarchy of life.
 n a) Systematics b) Nomenclature c) Biodiversity d) Classification
 1037. Which is the structural and functional unit of kidneys?
 R a) Crustaceans b) Nephron c) Aglomerular kidneys d) 120-170
 a grams
 y 1038. ____ is biting and chewing type.
 a) Hypognathous b) Orthopterus c) Hypopharynx d) Prothoracic
 c 1039. Muscles are formed by
) a. myocytes b. leucocytes c. osteocytes d. lymphocytes
 1040. Which does represent ventricular depolarization?
 C a) Electrocardiogram b) Sinu Auricular node c) P wave d) T wave
 a 1041. ____ protected by a third transparent eyelid.
 r a) Nictitating membrane b) Tympanic membranes
 o c) Cloacal aperture d) Fore limbs
 l 1042. Which level of organisation is exhibited in diploblastic animals like cnidarians?
 u a) Acellular level of Organisation b) Cellular level of Organisation
 s c) Tissue level of Organisation d) Organ level of Organisation
 1043. ____ which lie in the dermis responds to continuous pressure.
 L a) Ruffini endings b) Krause end bulbs c) Melanocytes d)
 i Vitiligo
 n 1044. Which is involved in absorption of more amounts of water?
 n a) Stomach b) Duodenum c) Small intestine d) Large intestine
 a 1045. What is the name of narrow finger like tubular projections that opens into the colon?
 e a) Peyers patches b) Crypts of Leiberkuhn
 u c) Vermiform appendix d) Haustra
 s 1046. What is the opening of trachea?
 d a) Glottis b) Epiglottis c) Both of these d) All of the above
) 1047. Wax producing sebaceous glands called ____ in the external auditory meatus.
 a) Cataract b) Ceruminous glands c) Middle ear d)
 C Eustachian
 h tube
 a 1048. Which are collected in the lymphatic fluid carried via the arterial blood and are recycled back to the lymph?
 r a) Lymphocytes b) Tunica intima c) Tunica media d) Tunica externa
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 e

- 1049) Rheumatic fever d) CPR
Which is remarkably reduced it leads to death of the muscle fibres?
a) 1050. Which of the following is not true regarding intestinal villi?
a) They possess microvilli.
M b) They increase the surface area.
y c) They are supplied with capillaries and the lacteal vessels.
o d) They only participate in digestion of fats.
c 1051. What is the name of a cartilaginous flap prevent the entry of food during
a swallowing?
r a) Glottis b) Epiglottis c) Both of these d) All of the above
d 1052. Which individuals who do not carry antigen D on the surface of the red blood cells
i ?
a a) Rh1 b) Rh2 c) Erythroblastosis foetalis d) Prothrombin
l 1053. The volume of the urine released is around _____.
a) 1.5 L per day b) Selective reabsorption c) Collecting duct d) Aquaporins
i 1054. The life cycle of *Lampito mauritii* takes about ____ to complete.
n a) Juveniles b) Non-clitellate c) Clitellate d) 60 days
f 1055. ____ are isolated glandular cells of the alimentary canal.
a a) Pseudo-stratified epithelial b) Glandular epithelium
r c) Goblet cells d) Salivary gland
c 1056. Name the part of stomach which open to oesophagus.
t a) Cardiac b) Fundus c) Corpus d) Pyloric
i 1057. Kidney stones are produced due to deposition of uric acid and
o a. silicates b. minerals c. calcium carbonate d. calcium oxalate
n 1058. The undigested particles along with earth are passed out through the anus _____.
a) Intestinal caecae b) Vermicasts c) Respiratory organs d)
b Oxygen
j 1059. ____ tissue is used to support.
a) Epithelial tissue b) Connective tissue
l c) Muscle tissue d) Nervous tissue
s 1060. Find odd one out - Reptiles.
c a) Crocodile b) Toad c) Frog d) Salamander
h 1061. Carl Woese & co - workers classified organisms based on the difference in
e genes.
m a) 16S rRNA b) 5S rRNA c) 70S rRNA d) 80S rRNA
i 1062. Which the cytoplasmic granules are large sized, but fewer?
c a) Granulocyte b) Neutrophils c) Eosinophils d) Basophils
1063. ____ lines most of the digestive tract, gall bladder and secretory ducts of glands.
h a) Microvilli b) Goblet cell
e c) Ciliated epithelium d) Nonciliated epithelium type
a 1064. Lateral ventricles I and II are separated from each other by a thin
r membrane called the _____.
t a) Lateral ventricles I and II b) Septum pellucidum
c) Aqueduct of Sylvius d) Cerebro spinal fluid
d 1065. ____ is sensitive, green, to medium wave-length of 530 nm.
i a) Erythropsin b) Chloropsin c) Presbyopia d) Astigmatism
s 1066. Which must be performed within 4 to 6 minutes after cessation of breath to
e prevent brain
a damage or death?
s a) William Harvey b) James Elam and Peter Safar c) CPR d) Defibrillation
e 1067. Which character is not included in Annelida?
a) The longitudinal and circular muscles in the body wall
c b) Body is covered by chitinous exoskeleton

c) H e and suckers

a
v

1068. Their cell wall contains peptidoglycans.

a) 70S type Bacteria b) 80S type Bacteria

l

c) Both of these d) All of the above

1069. Which does secrete HCl?

e

a) Chief cells b) Peptic cells c) Zymogen cells d) Oxyntic cells

a

1070. Find out the character of Cyclostomata.

a

a) Body is slender and eel-like bearing six to fifteen pair of gill slits for respiration

p

b) Cranium and vertebral column are cartilaginous

p

c) They are marine but migrate to fresh waters for spawning (anadromous migration)

e

d) All of the above

n

1071. The coelom contains the coelomic fluid and serves as a ____.

a

a) Hydrostatic skeleton b) Kalin c) Intestine d) Typhlosole

s

1072. Which is found in soft-bodied invertebrates?

e

a) Slow - oxidative fibres b) Fast - oxidative fibres

s

c) Fast - glycolytic fibres d) Hydrostatic skeleton

1073. Vermiculture, vermicomposting, vermiwash and wormery are collectively ____.

c

a) Vermitech b) Vermiculture c) Vermicomposting d) Vermiwash

1074. During synaptic transmission of nerve impulse, neurotransmitter (P) is released from synaptic vesicles by the action of ions (Q). Choose the correct P and Q.

e

a. P = Acetylcholine, Q = Ca⁺⁺

d

b. P = Acetylcholine, Q = Na⁺

p

c. P = GABA, Q = Na⁺

p

d. P = Cholinesterase, Q = Ca⁺⁺

1075. Which is plasma without fibrinogen?

r

a) Serum b) Heparin c) Lymph d) Lymph nodes

1076. Which of the following cranial nerve controls the movement of eye ball ?

p

a. trochlear nerve b. optic nerve c. Olfactory nerve d. vagus nerve.

o

1077. Which is meant for gaseous exchange?

d

a) Pleura b) Trachea c) Lungs d) Alveoli

i

1078. One or more similar families are grouped together to form a/an ____.

d) C

a) Species b) Genus c) Family d) Order

b

1079. ____ forms the hindbrain.

i

a) Rhombencephalon b) Cerebellum

t

c) Pons varoli d) Medulla oblongata

i

1080. ____ may be used as tools for the study of plant taxonomy.

n

a) Herbarium b) Botanical garden

o

c) Both of these d) None of the above

y

1081. Which is choking with difficulty in breathing?

s

a) Cerebral infarction b) Angina pectoris c) Atheroma d) Chest pain

s

1082. In both sexes, the 10th segment bears a pair of ____.

e

a) Genital pouch b) Gonapophysis c) Anal styles d) Anal cerci

t

1083. ____ are light touch receptors lying around the hair follicles.

a

- a Meissners corpuscles d) Pacinian corpuscles
) 1084. The ciliated epithelium lines the
 a) Skin b) Digestive tract c) Gall bladder d) Trachea
 T 1085. ___cells arranged into a circular secretory unit.
 a) Acinus b) Collagen c) Lacunae d) Macrophages
 c
 t
 i 1086. Which runs down into the interventricular septum of heart?
 a) Bundle of His b) Purkinje fibres c) Pacemaker d) Stethoscope
 l 1087. Which is a character of Hemichordata?
 e a) Earlier treated as a subphylum of Chordata
 m b) They are now regarded to be an independent phylum of invertebrates
 e c) This group possess the characters of invertebrates as well as chordates
 r d) All of the above
 k 1088. The affected person can see only the distant objects clearly____.
 e a) Fovea centralis b) Blind spot c) Myopia d) Hypermetropia
 l 1089. They have a body plan in which the body parts are organised in a circle around an axis.
 a) Asymmetrical b) Diploblastic c) Bilateral d) Triploblastic
 d 1090. Blood group is due to the presence or absence of surface
 i a) Antigens on the surface of WBC b) Antibodies on the surface of RBC
 s c) Antigens of the surface of RBC d) Antibodies on the surface of WBC
 c 1091. Elimination of ___performed by excretory system.
 a) Nitrogenous waste b) Mesonephric
 b c) Ureotelic d) Urinary bladder
) 1092. It is an autoimmune disorder affecting the action of acetylcholine at neuromuscular junction leading to fatigue.
 H a) Synovial joints or Diarthroses joints b) Myasthenia gravis
 a c) Tetany d) Muscle fatigue
 i 1093. Who did publish Methodus Plantarum Nova?
 r a) Theophrastus b) John Ray c) Carolus Linnaeus d) Ernst Haeckel
 f 1094. ___help to stop substances from leaking across a tissue.
 o a) Tight junctions b) Adhering junctions
 l c) Gap junctions d) Connective tissue
 l 1095. Which is the symptom of acute mountain sickness (AMS)?
 i a) Headache b) Shortness of breath
 c c) Nausea and dizziness d) All of the above
 l 1096. The opening between the right atrium and the right ventricle is guarded by____.
 e a) Tricuspid valve b) Bicuspid valve
 c c) Semilunar valves d) Trabeculae carneae
 r 1097. Choose the incorrect sentence from the following:
 e a) Bile juice emulsifies the fat.
 c b) Chyme is a digestive acidic food in stomach.
 e c) Pancreatic juice converts lipid into fatty acid and glycerol.
 P d) Enterokinase stimulates the secretion of pancreatic juice.
 t 1098. The muscles attached to the bones are called
 o a. skeletal muscle b. cardiac muscle
 r c. involuntary muscle d. smooth muscles
 s 1099. The head region of Cockroach pairs of and shaped eyes occur.
 c a) One pair, sessile compound and kidney shaped
) b) Two pairs, stalked compound and round shaped
 c c) Many pairs, sessile simple and kidney shaped
 d) Many pairs, stalked compound and kidney shaped

1100. Who was known as the "Father of Botany"?
 a) body fluid volume and ionic concentration.
) a) Osmoreceptors b) ADH
 c) Angiotensin Converting Enzyme inhibitors d) Diabetes insipidus
- T 1102. Which character is not included in Sponges?
 h a) They are primitive, multicellular, sessile animals
 e b) Cnidocytes or cnidoblasts seen with stinging cells or nematocyst on tentacles
 o c) The cells are loosely arranged
 p d) They are either radially symmetrical or asymmetrical animals
- h 1103. Which character is not included in Ctenophora?
 r a) Digestion is both extracellular and intracellular
 a b) Sexes are not separate (monoecious)
 s c) Polyps produce medusa asexually and medusa forms polyps sexually
 t d) They reproduce only by sexual means
- u 1104. ____ is characterized by increase in urea.
 s a) Uremia b) Renal calculi
 c) Pyleothotomy or lithotripsy d) Glomerulo nephritis
- b 1105. Match the following.
) A) Pharynx - i) 6th segment
 B) Oesophagus - ii) 14th to last segment
 J C) Gizzard - iii) 19th to last segment
 o D) Intestine - iv) 5th to 9th segment
 h E) Pharyngeal nephridia - v) 3rd to 4th segment
 n F) Micronephridia - vi) 7th segment to anus
 G) Meganephridia - vii) 5th segment
 R a) A - i), B - ii), C - iii), D - iv), E - v), F - vi), G - vii)
 a b) A - v), B - vii), C - i), D - vi), E - iv), F - ii), G - iii)
 y c) A - i), B - iii), C - iv), D - ii), E - vi), F - vii), G - v)
 c d) A - vii), B - vi), C - v), D - iv), E - iii), F - ii), G - i)
-) 1106. ____ fibres taper at both ends (fusiform) and do not show striations.
 a) Biopsy b) Autopsy c) Skeletal muscle tissue d) Smooth muscle
- C 1107. The centre of the inner concave surface of the kidney has a notch called the ____.
 a a) Medullary pyramids b) Renal columns of Bertini
 r c) Renal hilum d) Renal corpuscle
- o 1108. Which fibres spread into the ventricles?
 l a) Bundle of His b) Purkinje fibres c) Pacemaker d) Stethoscope
- u 1109. ____ beneath the skin acts as a support framework for epithelium.
 s a) Specialized connective tissues b) Areolar connective tissue
 c) Tissue fluid d) Adipose tissue
- L 1110. ____ consists of the cerebellum and medulla oblongata.
 i a) Olfactory ventricle b) Optic ventricles
 n c) Rhombencephalon d) Cerebellum
- n 1111. The medulla is divided into a few conical tissue masses called ____.
 a a) Medullary pyramids b) Renal columns of Bertini
 e c) Renal hilum d) Renal corpuscle
- u 1112. ____ keeps the body surface moist and free from harmful microorganisms.
 s a) Dorsal pores b) Coelomic fluid
 c) Female genital aperture d) Male genital apertures
- d 1113. ____ is articulated with the occipital condyles
) a) Hyoid bone b) Foramen magnum c) Atlas d) Sternum
1114. ____ is the ascending limb of Henle returns to the glomerular region of its own
 E nephron.
 r a) Peritubular capillaries b) Juxtaglomerular apparatus

- c ar membrane b) Clitellum c) Cochlea d) Homeothermic
)
- P
 e 1116. Which is painful respiration?
 r a) Dyspnoea b) Epiglottis c) Haemoglobin d) Herring-Breuer
 i reflex
- t 1117. What is role of surfactant?
 u a) Lowers the surface tension in the alveoli
 b) Prevents the lungs from collapsing
 u c) It also prevents pulmonary oedema
 l d) All of the above
- a 1118. Three domain classification was proposed by
 r a) R.H. Whittaker b) Carl Woese
 c) Carl Woese & co - workers d) Cavalier-Smith
- c 1119. Match the following columns and select the correct option.
 a Column - I Column - II
 p (p) Pila (i) Devil fish
 i (q) Dentalium (ii) Chiton
 l (r) Chaetopleura (iii) Apple snail
 l (s) Octopus (iv) Tusk shell
 a a) p - (ii), q - (i), r - (iii), s - (iv) b) p - (iii), q - (iv), r - (ii), s - (i)
 r c) p - (ii), q - (iv), r - (i), s - (iii) d) p - (i), q - (ii), r - (iii), s - (iv)
- i 1120. How much time take to replace the liver cells?
 e a) 3 - 4 weeks b) 3 - 4 days c) 2 - 3 weeks d) 2 - 3 days
- s 1121. The _____ consists of five bones called metatarsals.
 a) Ischium b) Acetabulum c) Tarsus d) Metatarsus
- d 1122. Concentration of urine depends upon which part of the nephron
) a. Bowmans capsule - Isotonic
 b. length of Henles loop - Hypertonic
 H c. P.C.T. - Isotonic
 y d. net work of capillaries arising from glomerulus- Hypotonic
- p 1123. The coelomic fluid of the earthworm is _____.
 e a) Hydrostatic skeleton b) Kalin c) Intestine d) Typhlosole
- r 1124. The olfactory lobes contain a small cavity called _____.
 n a) Olfactory ventricle b) Optic ventricles
 e c) Rhombencephalon d) Cerebellum
- p 1125. The skin is _____ ventrally.
 h a) Chordata b) Streamlined c) Dark green d) Pale
- r 1126. Who complicated classification which based on many combined
 o characters, as opposed to earlier taxonomists.
 m a) Theophrastus b) John Ray c) Carolus Linnaeus d) Ernst
 a Haeckal
1115. The non-flexible horizontal bars between the sides of the spine which
 a projects as a flat, expanded process called the _____.
) a) Vertebro-sternal ribs b) Vertebro-chondral ribs
 c) Vertebral ribs d) Acromion
- A 1128. Fertilization and development occurs within the _____.
 r a) Spermatophores b) Cocoons c) 2 - 3 weeks d) Direct
- t 1129. Which is made of smooth circular and longitudinal muscle fibres with a
 i network of nerve cells and parasympathetic nerve fibres which controls
 c peristalsis?
 u a) Serosa b) Muscularis c) Submucosa d) Mucosa
- l 1130. Scalavestibuli and scala tympani are filled with _____.

- a) Stereocilia
) 1131. Each segment is covered by the dorsal ____.
 a) Metathorax b) Tergum c) Sternum d) Boat
- P 1132. Which is the total volume of air a person can inhale after normal expiration
 e a) Vital capacity (VC) b) Inspiratory capacity (IC)
 r c) Expiratory capacity (EC) d) Total Lung Capacity (TLC)
- i l 1133. A regional epidermal swelling, from the cocoon ____.
 y a) Articular membrane b) Clitellum c) Cochlead d) Homeothermic
- m 1134. ____ consists of axon of preganglionic neuron and cell bodies of postganglionic neuron.
 p a) Preganglionic neuron b) Autonomic ganglion
 h c) Postganglionic neuron d) Exteroceptors
- b) 1135. Name the thin connective tissue sheath which covers the hepatic lobules.
) a) Gastric rugae b) Glissons capsule c) Goblet cell d) Haustra
- B 1136. Which circulatory system found in annelids, cephalochordates and vertebrates?
 a) Open type b) Closed type c) Both of these d) None of these
- a 1137. ____ a triple helix protein which allows for great tensile strength.
 s a) Acinus b) Collagen c) Lacunae d) Macrophages
- i l 1138. Which is the functional unit of the skeletal muscle?
 l a) Sarcomere b) Actin c) Meromyosin d) G-actin
- a 1139. Name the secretions of the Brunners gland along with the secretions of the intestinal glands constitute.
 r a) Enterokinase b) Succusentericus c) Both of these d) None of the above
- m 1140. A patients chart reveals that he has a cardiac output of 7500mL per minute and a stroke volume of 50 mL. What is his pulse rate (in beats / min)
 e a) 50 b) 100 c) 150 d) 400
- m b r 1141. The repeatedly branched short fibres coming out of the cell body are called ____.
 a a) Neurilemma b) Dendrites
 n c) Nissls granules d) Axon hillock
- e 1142. ____ are prokaryotic, their cells have no definite nucleus and DNA exists as a circular chromosomes and do not have histones associated with it.
 c a) Archaea b) Bacteria c) Eukarya d) All of these
-) 1143. ____ is a large, thin walled, on the dorsal side of the heart.
 O a) Gaseous exchange b) Pericardium
 r c) Sinus venosus d) Truncus arteriosus
- g 1144. ____ extends up to the 7th abdominal segment.
 a a) Week b) 45 minutes
 a c) Double ventral nerve cord d) Sub-oesophageal ganglion
- n 1145. ____ is a short tube that opens into the stomach.
 o a) Maxillary teeth b) Vomerine teeth c) Lower jaw d) Oesophagus
- f 1146. What is the molecular weight of Haemoglobin?
 f a) 66000 dalton b) 67000 dalton c) 68000 dalton d) 69000 dalton
- c 1147. All ____ consist of three main components namely fibres, ground substance and cells.
 o a) Connective tissues b) Fibres
 r c) Loose connective tissues d) Dense connective tissues
- t 1148. ____ is a protein found in the cytoskeleton and muscle cells.
 i a) Sarcomere b) Actin c) Meromyosin d) G-actin
- d 1149. Which is the chemical that causes addiction?

- a tem
) c) Nicotine d) All of the above
1150. Which is experienced during early stages of coronary heart disease?
 a) Cerebral infarction b) Angina pectoris c) Atheroma d) Chest pain
1151. The areas other than sensory and motor areas are called _____.
 a) Cerebrum b) Cerebral cortex
 c) Corpus callosum d) Association areas
1152. Mention the function of lasso cells or colloblasts.
 a) Respiration b) Capturing food c) Circulation d) Excretion
1153. _____ are based on comparative analysis of the similarities and dissimilarities of organisms.
 a) Taxonomical keys b) Museums
 c) Zoological parks d) Marine parks
1154. _____ mostly found in the ducts of sweat glands and mammary glands.
 a) Non keratinized squamous epithelium type
 b) Stratified cuboidal epithelium Transitional Epithelium

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c) Adamsia - Sea pen
b) Pennatula - Seafan
d) Gorgonia - Seaanemone
1156. Which is the function of liver?
a) Stores fat soluble vitamins and iron
b) Detoxifies toxic substances
c) Involves in the synthesis of non- essential amino acids and urea
d) All of the above
1157. The structure of the heart was described by _____ in 1706
a) Raymond de viessens b) Cardiac muscle c) Papillary muscles d) 300g
1158. A coiled tube found in the inner ear _____.
a) Articular membrane b) Clitellum c) Cochlea d) Home
- othermic
1159. _____ category includes an assemblage of one or more related families which show few common features.
a) Species b) Genus c) Family d) Order
1160. In which the blood volume in the capillaries is high but the flow of blood is slow?
a) Capillaries b) Veins c) Coronary artery d) Open circulatory system
1161. _____ is a typical cosmopolitan insect.
a) Fishing b) Cockroach c) Cursorial d) Vectors
- 1155 1162. Muscles are made of cells called _____ and constitute 40 - 50 percent of the body weight in mammals.
Which of the following is correctly matched?
a) Mesoderm b) Myocytes c) Tendon d) Fascicle
1163. Glomerular filtration rate, can activate JG cells to release renin which converts a plasma protein, angiotensinogen to _____.
a) Diabetes insipidus b) Angiotension I
c) Angiotension II d) Renin- Angiotensin- Aldosterone System
1164. Which is sound regulating cords also called larynx or voice box?
a) Hypoxia b) Pneumothorax c) Vocal cords d) Yawning
1165. The reversal of electrical charge is called _____.
a) Sodium-Potassium pump b) Depolarization
c) Threshold potential d) All or none principle
1166. Which character is not included in Mollusca?
a) The space between the visceral mass and mantle, ctenidia are present
b) The Spider silk is five times stronger than steel
c) These animals have a mesodermal endoskeleton of calcareous ossicles
d) It has been suggested that a Boeing 747 could be stopped in flight
1167. How does it with oesophagus open to the pharynx?
a) Buccal cavity b) Gizzard c) Wind pipe d) All of the above
1168. The excretory cells that are found in platyhelminthes are
a) Protonephridia b) Flame cells c) Solenocytes d) All of these
1169. _____ are thermoreceptors that sense temperature.
a) Ruffini endings b) Krause end bulbs c) Melanocytes d) Vitiligo
1170. _____ stores nutrients.
a) Adipocytes b) Adipose tissue c) Brown fat d) White fat
1171. Vital capacity is
a. TV + IRV b. TV + ERV c. RV + ERV d. TV + IRV + ERV
1172. What is the dental formula in cow?
a) 2033/1023 b) 0033/3133 c) 3142/3143 d) 2123/2123
1173. When the potential across the axon membrane is more negative than the normal resting potential, the neuron is said to be in a state of

- a on
 . c. Repolarization d. Hypopolarization
1174. The ___ of each side is joined posteriorly to form the dorsal aorta.
 D a) Systemic trunk b) Pulmo-cutaneous trunk c) Carotid d) Blood
- e 1175. Find odd one out - Triploblastic animals.
 p a) Animals in which the developing embryo has three germinal layers
 o b) In these animals endoderm gives rise to gastrodermis
 l c) They consist of outer ectoderm, inner endoderm
 a d) Most of the animals show organ system level of organisation
 r heophrastus b) John Ray c) Carolus Linnaeus d) Ernst
 i Haeckal
- z 1177. Which are also called polymorphonuclear cells?
 a) Granulocyte b) Neutrophils c) Eosinophils d) Basophils
- a 1178. ___ are phagocytic in nature.
 t a) Haemocytes b) 13 chambers c) Alary muscles d) Pulsatile
 i vesicle
- o 1179. Which is the character of fluid outside the cells?
 n a) Intercellular b) Intracellular c) Extracellular d) All of the above
- b 1180. Long microvilli called ___ project from the tip of the gustatory cells.
 a) Gustatory receptor b) Papillae c) Gustatory hairs d) Skin
- 1181. Muscles are specialized tissues which are derived from the embryonic ____.
 a) Mesoderm b) Myocytes c) Tendon d) Fascicle
- H 1182. Which thrive in acidic environments and at high temperatures.
 Y a) Extremophiles b) Halophiles c) Thermoacidophiles d) All of the above
- P 1183. ___ in a coronary artery results in heart attack.
 e a) Coronary heart disease b) Atherosclerosis c) Thrombus d)
 r Stroke
- p 1184. ___ created by the long loops of Henle of the JM nephrons which creates
 o medullary osmotic gradient.
 l a) Counter current multiplier b) Atrial Natriuretic Peptide or factor
 a c) Micturition d) 1 to 1.5L
- r 1185. The volume of filtrate formed per day is around _____.
 i a) 120-125mL/min b) Renal clearance
 z c) Tubular reabsorption d) 170-180 L per day
- a 1186. located in the upper lateral region of each orbit, secrete tears.
 t a) Interoceptors b) Proprioceptors
 i c) Sebaceous glands d) Lacrymal glands
- _____ bles b) Mushroom shaped gland
 —c) Seminal vesicles d) Gonapophyses
1188. ___ is the bone ends of the knees and other freely movable joints wear
 away as a person ages.
 a) Atrophy b) Muscle pull c) Arthritis d) Osteoarthritis
1189. Where is mixed blood present?
 a) Capillaries b) Veins c) Coronary artery d) Open circulatory
 system
1190. Evolutionary step produces a branching and all the members of the
 branch would possess the derived character which will not be seen in
 organisms.
 a) Cladistics b) Cladogram c) Both of these d) None of the
 above
1191. An earthworm is divided after the 17th segment _____ region.
 a) Setigerous sac b) Pre clitellar c) Clitellar d) Post - clitellar
- a) 1192. Four chambered heart is present in

- a hydrate b) Protein c) Lipid d) Vitamin
-) 1194. Groups of cells that are similar in structure ____.
- a) Tissues b) Organs c) Living fabrics d) Organ systems
- L 1195. Which secrete substances involved in coagulation or clotting of blood?
- i a) Agranulocytes b) Lymphocyte c) Monocytes d) Platelets
- z 1196. ____ connects the hypothalamus with the pituitary gland.
- a a) Hypothalamus b) Infundibulum
- r c) Mammillary bodies d) Satiety centre
- d 1197. In 1956, ____ were the first to use mouth to mouth resuscitation.
- a) William Harvey b) James Elam and Peter Safar c) CPR d) Defibrillation
- b 1198. ____ forms the posterior most part of the brain.
-) a) Rhombencephalon b) Cerebellum
- c) Pons varoli d) Medulla oblongata
- S 1199. Which constitute 1-3% of the total WBCs?
- n a) Agranulocytes b) Lymphocyte c) Monocytes d) Platelets
- a 1200. ____ tissue is used to covering.
- k a) Epithelial tissue b) Connective tissue
- e c) Muscle tissue d) Nervous tissue
1201. What is the instrument used to measure the volume of air?
- c a) Thermometer b) Spirometer c) Sphygmomanometer d)
-) Stethoscope
1202. Which is the outer layer, composed of collagen fbres?
- S a) Lymphocytes b) Tunica intima c) Tunica media d) Tunica externa
- c 1203. Name the process of all the body tissues utilize the absorbed substance
- o for their activities and incorporate into their protoplasm.
- r a) Digestion b) Absorption c) Assimilation d) Egestion
- P 1204. What is the technical term of the permanent teeth of four different types?
- i a) Thecodont b) Diphyodont c) Heterodont d) Homodont
- o 1205. The last 11th and 12th pairs of ribs are not connected ventrally. Therefore,
- n they are called as floating ribs or
- d a) Vertebro-sternal ribs b) Vertebro-chondral ribs
-) c) Vertebral ribs d) Acromion
1206. The first ever human kidney transplant performed in India was done at the
- C King Edward Memorial Hospital at Bombay in May 1965, using a cadaver donor in
- r a non-renal failure patient who had had ____.
- o a) Peritubular capillaries b) Juxtaglomerular apparatus
- c c) Peritubular capillaries d) Hypernephroma
- o 1207. ____ includes fat and the fibrous tissue of ligaments.
- d a) Tight junctions b) Adhering junctions
- i c) Gap junctions d) Connective tissue
- l 1208. A cockroach can live for a ____ without its head.
- e a) Week b) 45 minutes
- 1193 c) Double ventral nerve cord d) Sub-oesophageal ganglion
- . Which is best storage of reserved food?
- a 1209. Which cells are found in the lymphatics?
-) a) Lymphocytes b) Tunica intima c) Tunica media d) Tunica externa
-) 1210. Which is the special flap of muscle which initiates the heart beat?
- C a) Electrocardiogram b) Sinu Auricular node c) P wave d) T
- a wave
- r 1211. Which is a character of Chordata?
- b a) Presence of elongated rod like notochord below the nerve cord and
- o above the alimentary canal
- h b) A dorsal hollow or tubular fluid filled nerve cord lies above the

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c) Presence of pharyngeal gill slits or clefts in all chordates at some stage of their lifecycle

d) All of the above

Speech and swallowing is ____.

) Trigeminal nerve b) Trochlear nerve c) Vagus d)

Hypoglossal

1213. Short genetic marker in an organisms DNA to identify it as belonging to a particular species.

a) DNA barcoding

b) DNA hybridization

c) DNA fingerprinting

d) All of the above

1214. Most invertebrates have a simple tubular structure in the form of ____ called protonephridia.

a) Ureoteles

b) Earthworms

c) Primitive kidneys

d) Kidneys

1215. ____ assist in amplifying the croaking sound of frog.

a) Hind limbs

b) Vocal sacs

c) Nuptial pad

d) Muscular sticky tongue

1216. Which is the chief force that pushes water and solutes out of the blood and across the filtration membrane?

a) Passive process

b) 180l

c) Glomerular pressure

d)

Ultrafiltration

1217. Triploblastic animals like echinoderms (e.g., starfish) have five planes of symmetry and show

a) Asymmetrical

b) Radial symmetry

c) Biradial symmetry

d) Pentamerous radial symmetry

1218. Enterokinase takes part in the conversion of

a) Pepsinogen into pepsin

b) Trypsinogen into trypsin

c) Protein into polypeptide

d) Caseinogen into casein

1219. ____ present as pair on both sides of intersegmental septa of the 19th segment.

a) Supra - pharyngeal ganglia

b) Tufted nephridia

c) Integumentary nephridia

d) Septal nephridia

1220. The skin is ____ on the dorsal side.

a) Chordata

b) Streamlined

c) Dark green

d) Pale

1221. ____ forms the roof of the diencephalon.

a) Epithalamus

b) Choroid plexus

c) Pineal body

d)

Melatonin

1222. The nutritive fluid is deposited in the ____ produced by the gland cells of the clitellum.

a) Spermatophores

b) Cocoons

c) 2 - 3 weeks

d) Direct

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1223. Which of the following pairings is correct?
 . Motor nerve - ventral

a. S 1224. Muscle fibre has multiple oval nuclei just beneath its ____.

- e a) Epimysium b) Perimysium
 n c) Endomysium d) Sarcolemma

s 1225. In which, the blood from heart is taken to the lungs by pulmonary artery
 o and the oxygenated blood from the lungs is emptied into the left auricle
 r by the pulmonary vein

- y a) Systemic circulation b) Pulmonary circulation
 c) Vagus nerve d) Hypertension

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- Monocytes d) Platelets
1227. ___ is a thick walled on the ventral surface of the heart.
 a) Gaseous exchange b) Pericardium
 c) Sinus venosus d) Truncus arteriosus
1228. Which character is not included in Annelida?
 a) Development may be direct or indirect
 b) Development is direct or indirect and includes a trochophore larva
 c) Aquatic or terrestrial, free living but some are parasitic
 d) Triploblastic, bilaterally symmetrical, schizocoelomates
1229. Which is a tuft of capillaries that filters protein?
 a) Aquaporins b) Bowmans capsule hydrostatic pressure
 c) Glomerular capillary pressure d) Glomerulus
1230. ___ may be due to the blockage of ear canal with earwax.
 a) Tectorial membrane b) 20 times
 c) Perilymph d) Conductive deafness
1231. Which is the volume of air remaining in the lungs after a forceful expiration?
 a) Tidal Volume (TV) b) Inspiratory Reserve Volume (IRV)
 c) Expiratory Reserve Volume (ERV) d) Residual Volume (RV)
- 1226 . In which blood normally contains 1, 50,000 - 3, 50,000 platelets mm³ of blood?
 1232. ___ are the granules of stored glycogen that provide glucose during the
 a) period of muscle fibre activity.
) a) Sarcoplasm b) Myoglobin c) Glycosomes d) Anisotropic bands
- A 1233. ___ found in the kidney tubules, ducts and secretory portions of small glands.
 a) Simple epithelium b) Squamous epithelium
 c) Columnar epithelium d) Cuboidal epithelium
1234. Which character is included in Echinodermata?
 a) Reproduction is sexual and fertilization is external
 b) Development is indirect with free swimming bilaterally symmetrical larval forms
 c) Exhibit autotomy with remarkable powers of regeneration
 d) All of the above
1235. The ___ is solid.
 a) Week b) 45 minutes
 c) Double ventral nerve cord d) Sub-oesophageal ganglion
1236. The presence of ___ on the apical surface of the absorptive cells.
 a) Microvilli b) Goblet cell
 c) Ciliated epithelium d) Nonciliated epithelium type
1237. Vasa efferentia arise from each _____.
 a) Mesovarium b) Testis c) Ovisacs d) Tadpole
1238. provide information about position and movements of the body.
 a) Interoceptors b) Proprioceptors
 c) Sebaceous glands d) Lacrymal glands
1239. ___ are the granules of stored glycogen that provide glucose during the
 a) period of muscle fibre activity.
) a) Sarcoplasm b) Myoglobin c) Glycosomes d) Anisotropic bands

1239. Which acts as a reflex centre for vision and hearing?
 a) Emotional brain b) Brain stem c) Mid brain d) Corpora quadrigemina
1240. The _____ are present in earthworm from the 10th segment onwards.
 a) Dorsal pores b) Coelomic fluid
 c) Female genital aperture d) Male genital apertures
1241. How does the digestive system include?
 a) Alimentary canal b) Associated digestive glands
 c) Both of these d) None of the above
1242. _____ is formed by the fusion of six segments and shows great mobility in all directions.
 a) Hypognathous b) Orthopterus c) Hypopharynx d) Prothoracic
1243. _____ tissue is used to control.
 a) Epithelial tissue b) Connective tissue
 c) Muscle tissue d) Nervous tissue
1244. What are the blood vessels that carry blood away from the heart?
 a) Arteries b) KiloPascal (KPa) c) Small sphincter d) Anastomoses
1245. Terminal branches of tracheal tubes are called _____.
 a) Salivary glands b) Trachea c) Stigmata d) Tracheoles
1246. A single glycogen molecule may contain _____.
 a) Adenosine triphosphate b) Neuromuscular junction
 c) Skeletal Muscle Glycogen Analysis d) 5000 glucose units
1247. _____ rapid muscle spasms occur in the muscles due to deficiency of parathyroid hormone.
 a) Synovial joints or Diarthroses joints b) Myasthenia gravis
 c) Tetany d) Muscle fatigue
1248. Every unit of classification regardless of its rank is
 a) Taxon b) Variety c) Species d) Strain
1249. How does allergy produce?
 a) Carcinogens b) Allergens c) Pollutants d) All of the above
1250. Special cells on the coelomic wall of the intestine, called _____ are present.
 a) Nephrostome b) Chloragogen cells c) Monoecious d) Protandrous
1251. What is the amount of dead space?
 a) 100ml b) 150ml c) 200ml d) 250ml
1252. _____ secretes bile which is stored in the gall bladder.
 a) Liver b) Bilobed c) Hydrochloric acid d) Chyme
1253. In which the capillary beds are the site for exchange of materials between blood and tissues?
 a) Capillaries b) Veins c) Coronary artery d) Open circulatory system
1254. The median thin layer of cranial cavity is _____.
 a) Duramater b) Arachnoid mater c) Piamater d) Subarachnoid space
1255. The innermost layer of cranial cavity is _____.
 a) Duramater b) Arachnoid mater c) Piamater d) Subarachnoid space
1256. Which slimy material rich in mucus membrane lining the airway?
 a) Goblet cells b) Glycoprotein c) Epithelial cells d) All of the above
1257. Exoskeleton of which phylum consists of chitinous cuticle?
 a) Annelida b) porifera c) Arthropoda d) Echinodermata
1258. Binomial Nomenclature was popularized by
 a) Huxley and Stricklandt b) Carolus Linnaeus

- c) Charles Darwin d) Aristotle
1259. Archaea appears to have more in common with the _____ than the Bacteria.
a) Prokarya b) Eukarya c) Both of these d) None of the above
1260. Which constitute 28% of WBCs?
a) Agranulocytes b) Lymphocyte c) Monocytes d) Platelets
1261. _____ is Heme containing protein that binds molecular oxygen in muscle cells.
a) Myoglobin b) Sarcolemma
c) Sarcomere d) Ilium
1262. If repolarization becomes more negative than the resting potential _____.
a) Repolarisation b) Hyperpolarization
c) Lazy gates d) Nodes of Ranvier
1263. Which are phagocytic in nature and appear in large numbers in and around the infected tissues?
a) Granulocyte b) Neutrophils c) Eosinophils d) Basophils
1264. Examine the diagram of the two cell types A and B given below and select the correct option.
a. Cell-A is the rod cell found evenly all over retina
b. Cell-A is the cone cell more concentrated in the fovea centralis



- c. Cell-B is concerned with colour vision in bright light
d. Cell-A is sensitive to bright light intensities
1265. In some animals, cells that perform similar functions are aggregated to form tissues.
a) Acellular level Organisation b) Cellular level Organisation
c) Tissue level Organisation d) Organ level Organisation
1266. Which character is not included in Sponges?
a) They possess a water transport system or canal system
b) Water enters through minute pores called ostia lining the body wall
c) Cnidoblasts are used for anchorage, defense, and to capture the prey
d) Water enters into a central cavity (spongocoel) and goes out through the osculum
1267. The 8th, 9th and 10th pairs of ribs do not articulate directly with the sternum but joined with the cartilaginous part of the seventh rib are called false ribs or _____.
a) Vertebro-sternal ribs b) Vertebro-chondral ribs
c) Vertebral ribs d) Acromion
1268. Which does produce excitation through depolarisation of the heart?
a) Bundle of His b) Purkinje fibres c) Pacemaker d) Stethoscope
1269. Kidneys are _____ in frog.
a) Nitrogenous waste b) Mesonephric c) Ureotelic d) Urinary bladder
1270. The symmetry exhibited in cnidarians is
a) Radial b) Bilateral c) Pentamerous radial d) Asymmetrical
1271. Which is the ventricles begins to relax, pressure in the arteries exceeds ventricular pressure, resulting in the closure of the semilunar valves?
a) Ventricular diastole b) Cardiac output

- c) Systolic pressure d) Diastolic pressure
1272. Which of the following have the highest number of species in nature?
a) Insects b) Birds c) Angiosperms d) Fungi
1273. ___forms the moist lining of the oesophagus, mouth, conjunctiva of the eyes.
a) Non keratinized squamous epithelium type
b) Stratified cuboidal epithelium
c) Stratified columnar epithelium
d) Transitional Epithelium
1274. Which is an increased heart rate ?
a) Tachycardia b) Bradycardia c) Ventricular diastole d) Atrial systole
1275. How is circulatory system seen in annelids, cephalochordates and vertebrates?
a) The blood remains filled in tissue spaces due to the absence of blood capillaries
b) The blood is circulated through blood vessels of varying diameters
c) Both of these
d) None of these
1276. Which is seen in Annelids, Cephalopods and Vertebrates?
a) Haemocoel b) Closed circulatory system
c) Muscular chambered heart d) Two chambered heart
1277. A thin walled unpaired ___ is present.
a) Nitrogenous waste b) Mesonephric c) Ureotelic d) Urinary bladder
1278. Mention respiratory organs in aquatic Limulus.
a) Apnoea b) Book gills c) Book lungs d) COLD
1279. Which is the outermost layer of stomach?
a) Serosa b) Muscularis c) Submucosa d) Mucosa
1280. ___ have collection of preserved plants and animals for study and ready reference.
a) Taxonomical keys b) Museums c) Zoological parks d) Marine parks
1281. The bundle of muscle fibres is called
a. Myofibrils b. fascicle c. sarcomere d. sarcoplasm
1282. ___conveys nerve impulses from autonomic ganglia to visceral effector organs.
a) Preganglionic neuron b) Autonomic ganglion
c) Postganglionic neuron d) Exteroceptors
1283. The caloric value of carbohydrate is
a) 4.1 b) 9.45 c) 5.65 d) 9.1
1284. ___decline or cessation of muscular activity results in the condition.
a) Atrophy b) Muscle pull c) Arthritis d) Osteoarthritis
1285. The plasma membrane covering the neu-ron is called _____.
a) Neurilemma b) Dendrites
c) Nissls granules d) Axon hillock
1286. All of the following are associated with the myeline 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
1287. ___described species as a group of morphologically similar organisms arising from a common ancestor.
a) Origin of Species b) Systema naturae
c) Historia Generalis Plantarum d) Tautonymy
1288. What taxonomic aid gives comprehensive information about a taxon?
a) Taxonomic Key b) Herbarium c) Flora d) Monograph

1289. The cells of the _____ are not capable of independent existence and exhibit division of labour.
 a) Protozoans b) Metazoans c) Both of these d) None of the above
1290. _____ or aerobic activities increase the breathing and heart rate.
 a) Rheumatoid arthritis b) Gouty arthritis or gout
 c) Osteoporosis d) Endurance
1291. Asthma is caused due to
 a. bleeding in pleural cavity. b. infection of nose
 c. damage of diaphragm. d. infection of lungs
1292. 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 allows this?
 a. relative lack of smooth muscles b. presence of valves
 c. proximity of the veins to lymphatics d. thin endothelial lining
1293. Where is found hydrostatic skeleton in the following characters?
 a) Acoelom b) Pseudocoelom c) Eucoelom d) Enterocoelom
1294. The crop is followed by the gizzard or _____.
 a) Gynoalvular plates b) Foregut c) Crop d) Proventriculus
1295. _____ body temperature varies with the varying environmental temperature.
 a) Rana hexadactyla b) Amphibian c) Anura d) Poikilothermic
1296. Which is expressed the ratio of red blood cells to blood plasma?
 a) Erythropoietin b) Erythropoiesis c) Haematocrit d) Granulocyte
1297. Where is present pneumotaxic centre in the brain?
 a) Cerebrum b) Cerebellum c) Pons varoli d) Medulla oblongata
1298. In Pheretima locomotion occurs with help of
 a) circular muscles b) longitudinal muscles and setae
 c) circular, longitudinal muscles and setae d) parapodia
1299. _____ aimed at publishing a complete system of nature, which included works on mammals, reptiles, birds, fishes and insects.
 a) Theophrastus b) John Ray c) Carolus Linnaeus d) Ernst Haeckal
1300. The location and numbers of malpighian tubules in Periplaneta.
 a) At the junction of midgut and hindgut, about 150.
 b) At the junction of foregut and midgut, about 150.
 c) Surrounding gizzard, eight.
 d) At the junction of colon and rectum, eight.
1301. Which is the respiratory organs of Scorpions and most spiders?
 a) Apnoea b) Book gills c) Book lungs d) COLD
1302. _____ nerves are 10 pairs in frog.
 a) Foramen magnum b) Spinal cord c) Cranial d) All of the above
1303. The ionic gradient across the resting mem-brane is maintained by ATP driven _____.
 a) Sodium-Potassium pump b) Depolarization
 c) Threshold potential d) All or none principle
1304. What is the effect of suffocation on the skin?
 a) Turns bluish b) Turns reddish c) Turns yellowish d) Turns white
1305. Animals such as sponges lack _____ tissue.
 a) nervous b) muscle c) Both of these d) None of the above
1306. _____ have a hard and non-pliable ground substance rich in calcium salts.
 a) Elastic connective tissue b) Specialised connective tissues
 c) Cartilages d) Bones
1307. The brain but separated from the arach-noid mater by the _____.
 a) Duramater b) Arachnoid mater c) Piamater d) Subarachnoid space

1308. The ___ consists of plasma, RBC, WBC and platelets.
 a) Systemic trunk b) Pulmo-cutaneous trunk c) Carotid d) Blood
1309. Molecular taxonomic tool consists of
 a) DNA and RNA b) Mitochondria and Endoplasmic reticulum
 c) Cell wall and Membrane proteins d) All the above
1310. ___ are freely movable joints, the articulating bones are separated by a cavity.
 a) Synovial joints or Diarthroses joints b) Myasthenia gravis
 c) Tetany d) Muscle fatigue
1311. ___ cells get specialized for secretion.
 a) Pseudo-stratified epithelial b) Glandular epithelium
 c) Goblet cells d) Salivary gland
1312. What is the activity of the gastro-intestinal tract carried out?
 a) Neural b) Hormonal control c) Both of these d) None of the above
1313. The Oxygen Dissociation Curve is
 a. sigmoid b. straight line c. curved d. rectangular hyperbola
1314. Match the following.
 A) Epigeics - i) First segment
 B) Anecics - ii) Overhanging the mouth
 C) Endogeics - iii) Last segment
 D) Peristomium - iv) Octochaetonathurstoni
 E) Prostomium - v) Lampito mauritii
 F) Pygidium - vi) Perionyx excavatus
 a) A - i), B - ii), C - iii), D - iv), E - v), F - vi)
 b) A - vi), B - v), C - iv), D - iii), E - ii), F - i)
 c) A - v), B - vi), C - iii), D - iv), E - i), F - ii)
 d) A - vi), B - v), C - iv), D - i), E - ii), F - iii)
1315. Renal stones can be removed by techniques like _____.
 a) Uremia b) Renal calculi
 c) Pyleothotomy or lithotripsy d) Glomerulo nephritis
1316. The inner osteogenic layer consists of _____.
 a) Metaphysis b) Periosteum c) Osteoblasts d) Endosteum
1317. The practice of naming the animals in which the generic name and species name are the same, is called _____.
 a) Binomial Nomenclature b) Trinomial Nomenclature
 c) Tautonymy d) All of the above
1318. In males, the ___ lies at the hind end of the abdomen.
 a) Genital pouch b) Gonapophysis c) Anal styles d) Anal cerci
1319. ___ is made of a single layer of cube like cells.
 a) Simple epithelium b) Squamous epithelium
 c) Columnar epithelium d) Cuboidal epithelium
1320. ___ neuron takes the sensory impulse to the grey (afferent) matter of the spinal cord.
 a) Sensory Receptor b) Sensory Neuron
 c) Interneurons d) Motor Neuron
1321. ___ is similar to areolar tissue in structure and function.
 a) Specialized connective tissues b) Areolar connective tissue
 c) Tissue fluid d) Adipose tissue
1322. ___ helps in the grinding of the food particles.
 a) Gizzard b) Enteric caecae c) Malphigian tubules d) Hindgut
1323. ___ is the father of modern taxonomy.
 a) Carolus Linnaeus b) Aristotle
 c) Augustin Pyramus de Candolle d) Charles Darwin
1324. ___ exerts the greatest control over the body's responsiveness.

- a) Cardiac muscle tissue b) Parkinsons disease
c) Alzheimers disease d) Nervous tissue
1325. The efferent arteriole serving the juxta medullary nephron forms bundles of long straight vessel called_____.
- a) Vasa recta b) Cortical nephrons
c) Ornithine cycle d) Glomerular filtration
1326. The prostate gland serves to cement the spermatozoa into bundles____.
- a) Spermatophores b) Cocoons c) 2 - 3 weeks d) Direct
1327. They do not possess membrane bound organelles except for ribosome.
- a) 70S type Bacteria b) 80S type Bacteria
c) Both of these d) All of the above
1328. Who was considered as English Naturalist?
- a) Theophrastus b) John Ray
c) Carolus Linnaeus d) Ernst Haeckal
1329. Which are also called thrombocytes that are produced from megakaryocytes and lack nuclei?
- a) Agranulocytes b) Lymphocyte c) Monocytes d) Platelets
1330. INOTAXA is an electronic resource for digital images includes in
- a) Neo taxonomical tool b) Ethology of taxonomical tool
c) e - taxonomic resource d) All of the above
1331. Frogs are called___organisms.
- a) Nitrogenous waste b) Mesonephric c) Ureotelic d) Urinary bladder
1332. _____facilitate the cells to communicate with each other.
- a) Tight junctions b) Adhering junctions
c) Gap junctions d) Connective tissue
1333. This is used to identify an individual from a sample of DNA by looking at unique patterns in their DNA.
- a) DNA barcoding b) DNA hybridization
c) DNA fingerprinting d) All of the above
1334. Male bears a pair of short and slender_____in the 9th sternum.
- a) Genital pouch b) Gonapophysis c) Anal styles d) Anal cerci
1335. Which is the function of liver?
- a) Destroys aging and defective blood cells
b) Stores glucose in the form of glycogen or disperses glucose
c) Stores fat soluble vitamins and iron
d) All of the above
1336. The protein present in the thick filament is
- a. myosin b. actin c. pectin d. leucin
1337. The____is the superior flaring portion of the hip bone.
- a) Myoglobin b) Sarcolemma c) Sarcomere d) Ilium
1338. _____supply the renal tissue, involved in exchanges with the fluid in the tubular region.
- a) Peritubular capillaries b) Juxtglomerular apparatus
c) Peritubular capillaries d) Hypernephroma
1339. Which is characterized by excessive thirst and excretion of large quantities of dilute urine resulting in dehydration and fall in blood pressure?
- a) Diabetes insipidus b) Angiotension I
c) Angiotension II d) Renin- Angiotensin- Aldosterone System
1340. During inspiration, the diaphragm
- a. expands. b. unchanged
c. relaxes to become domed-shaped. d. contracts and flattens