

ZOOLOGY

151. Which of the following does not distinguish the nervous system from the endocrine system?
- (1) Transmission of nervous
 - (2) The nervous system uses chemical communication
 - (3) Nervous system messages are delivered directly to target cells or organs
 - (4) The structural complexity of the nervous system allows for integration of more information and responses.
152. Interneurons
- (1) may connect sensory and motor neurons
 - (2) are confined to the PNS
 - (3) are confined to the CNS
 - (4) are electrical synapses between neurons
153. Which of the following animals is mismatched with its nervous system?
- (1) sea star (echinoderm) – modified nerve net, central nerve ring with radial nerves
 - (2) Hydra (cnidarian) – ring of ganglia, paired ventral nerve cords
 - (3) annelid worm – brain, ventral nerve cord with segmental ganglia
 - (4) vertebrate – dorsal central nervous system of brain and spinal cord
154. The superior and inferior colliculi
- (1) control biorhythms and are found in the thalamus
 - (2) are the part of the limbic system found in the midbrain
 - (3) are located in the parietal and frontal lobe, respectively, and involved in a language and speech
 - (4) are nuclei in the midbrain involved in hearing and vision
155. Which of the following structures is incorrectly paired with its function?
- (1) pons – conducts information between spinal cord and brain
 - (2) cerebellum – contains the tracts that cross motor neurons from one side of the brain to the other side of the body
 - (3) thalamus – screens and relays incoming impulses to the cerebrum
 - (4) corpus callosum – band of fibres connecting left and right hemisphere
156. Fourth ventricle of brain is situated in
- (1) Medulla
 - (2) Olfactory lobes
 - (3) Diencephalon
 - (4) Cerebrum
157. Nervous band connecting the two cerebral hemispheres is
- (1) corpus albicans
 - (2) corpus callosum
 - (3) corpus striatum
 - (4) corpus spongiosum
158. Sella tursica is
- (1) band connecting cerebral hemisphere
 - (2) foramen of skull
 - (3) skull depression for lodging pituitary
 - (4) lodging of heart
159. Which cranial nerve is purely sensory?
- (1) Adbucens
 - (2) Auditory
 - (3) Vagus
 - (4) Spinal accessory
160. Memory centre is present in
- (1) cerebellum
 - (2) parietal lobe
 - (3) temporal lobe
 - (4) occipital lobe
161. Part of brain controlling balance and coordination is
- (1) cerebrum
 - (2) medulla oblongata
 - (3) hypothalamus
 - (4) cerebellum
162. Touch on the right side stimulate nervous on
- (1) right somatic sensory area
 - (2) right somatic motor area
 - (3) left somatic sensory area
 - (4) both (2) and (3)
163. Diencephalon is related to
- (1) pons
 - (2) corpora quadrigemina
 - (3) basal ganglia
 - (4) hypothalamus
164. Respiratory centre of brain is sensitised by
- (1) more O₂ concentration in blood
 - (2) more blood in brain
 - (3) more blood in lungs
 - (4) more CO₂ concentration
165. Which is mismatched?
- (1) Cerebrum - Memory
 - (2) Medulla oblongata - Temperature regulation
 - (3) Cerebellum - Equilibrium
 - (4) Olfactory - Smell

166. Lateral ventricles are connected to third ventricle through
- (1) iter
 - (2) foramen of Monro
 - (3) corpus striatum
 - (4) filum terminale

167. Column I lists the parts of human brain and column II lists the functions. Match the two columns and identify the correct choice from those given

Column I **Column II**

- | | |
|-----------------|---------------------------------------|
| A. Cerebrum | (i) controls the pituitary |
| B. Cerebellum | (ii) controls vision and hearing |
| C. Hypothalamus | (iii) controls the rate of heart beat |
| D. Midbrain | (iv) seat of intelligence |
| | (v) maintains body posture |

- (1) A - (v), B -(iv), C - (ii) , D - (i)
- (2) A - (iv), B -(v), C - (ii) , D - (i)
- (3) A - (v), B -(iv), C - (i) , D - (ii)
- (4) A - (iv), B -(v), C - (i) , D - (ii)

168. Which part of the human brain controls the breathing movements?

- (1) Medulla oblongata
- (2) Cerebellum
- (3) Diencephalon
- (4) Cerebrum

169. Arbor vitae is

- (1) tree like structure in cerebrum
- (2) tree of life in cerebellum
- (3) end part of spinal cord
- (4) branched dendrites of a neuron

170. Midbrain contains

- (1) corpora quadrigemina
- (2) diencephalon
- (3) cerebrum
- (4) none of these

171. 5th cranial nerve of frog is called

- (1) optic nerve
- (2) vagus
- (3) trigeminal
- (4) ophtalmic

172. Reabsorption of water in distal parts of kidney tubules/ urine concentration is controlled by

- (1) vasopressin/ADH
- (2) oxytocin
- (3) calcitonin
- (4) relaxin

173. Goitre influences

- (1) speech
- (2) excretion
- (3) metabolism
- (4) vision

174. Mammalian character in human brain is

- (1) Location of brain in the cranium
- (2) Covered by meninges
- (3) Cerebro spinal fluid in the ventricles
- (4) Corpus callosum

175. White matter of spinal cord is mainly made up of

- (1) Nerve fibres without myelin sheaths
- (2) Nerve cells
- (3) Nerve fibres with myelin sheaths
- (4) Areolar tissue with abundance of white fibres

176. Glenoid cavity is found in

- (1) pelvic girdle
- (2) pectoral girdle
- (3) sternum
- (4) humerus

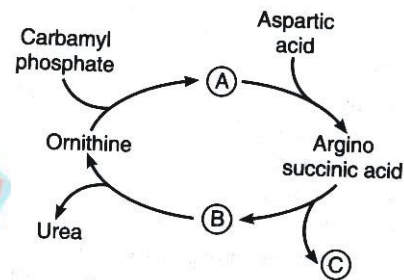
177. The joint formed between humerus and radio ulna is

- (1) gliding
- (2) pivot
- (3) hinge
- (4) bound socket

178. Which of the following form thoracic cage of man?

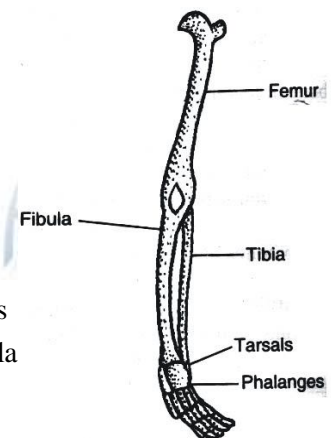
- (1) Ribs, sternum and thoracic vertebra
- (2) Ribs and sternum
- (3) Ribs, sternum and limber vertebrae
- (4) Ribs and thoracic vertebrae

179. In the skeletal form of Ornithine cycle given below some intermediate products are indicated by alphabets. Choose the answer in which these alphabets are properly matched with the name of corresponding products



- (1) A = Citrulline, B = Fumaric acid, C = Arginine
- (2) A = Citrulline, B = Arginine, C = Fumaric acid
- (3) A = Arginine, B = Succinic acid, C = Fumaric acid
- (4) A = Citrulline, B = Arginine, C = Succinic acid

180. Given below is a diagram of the bones of the left human hindlimb as seen from front. It has certain mistakes in labelling. Two of the wrongly labelled bones are



- (1) tibia and tarsals
- (2) femur and fibula

- (3) fibula and phalanges
(4) tarsals and femur
181. A cricket player is fast chasing a ball in the field. Which one of the following groups of bones are directly contributing in this movement?
(1) Femur, malleus, tibia, metatarsals
(2) Pelvis, ulna, patella, tarsals
(3) Sternum, femur, tibia, fibula
(4) Tarsals, femur, metatarsals, tibia
182. Phalangeal/ digital formula for human hand/ foot is
(1) 0, 2, 2, 3, 3 (2) 0, 2, 3, 3, 3
(3) 2, 2, 3, 3, 3 (4) 2, 3, 3, 3, 3
183. Bending of ankle joint is brought about by
(1) biceps (2) triceps
(3) trapezius (4) gastrocnemius
184. The false pelvis is
(1) inferior to the true pelvis
(2) found in the male only
(3) narrower in the male than in the female
(4) not really part of the skeletal system
185. A number of bones in the skull of man are
(1) 10 (2) 18
(3) 206 (4) 23
186. The trigone is
(1) a urine filled cavity within the kidney
(2) a muscular sphincter at the neck of the urinary bladder
(3) a smooth connective tissue region in the urinary bladder
(4) a tunic of the ureter
187. Synovial fluid that lubricates a synovial joint is produced by
(1) a meniscus
(2) the synovial membrane
(3) a bursa
(4) the articular cartilage
188. Number of bones in human axial skeleton is
(1) 80 (2) 100
(3) 106 (4) 126
189. Select the correct statement
(1) Cervical vertebrae are characterised by the presence of large and flat transverse processes.
(2) Manubrium, mesosternum and a
(3) Malleus is the largest bone
(4) Lower jaw of mammals consists of six bones
190. Greater trochanter is found in
(1) Humerus (2) Radius
(3) Ulna (4) Femur
191. An acromian process is characteristically found in the
(1) Pectoral girdle of mammals
(2) Sperm of mammals
(3) Pelvic girdle of mammals
(4) Skull of frog
192. A deltoid ridge is characterisitic feature of
(1) Radius (2) Ulna
(3) Femur (4) Humerus
193. Which of the following word is used to represent a bone as well as a vein?
(1) Jugular (2) Subclavian
(3) Carotid (4) Innominate
194. As per sliding filament theory of muscle contraction?
(1) Thin filament slide under thick-filament remains
(2) Thick filament moves but thin filament is static
(3) Both thick and thin filaments move
(4) None of these filaments move but the Z-line moves
195. Arthritis is caused by
(1) Lack of synovial fluid
(2) Deposition of uric acid crystal in synovial cavity
(3) Ossification of articular cartilage
(4) All of these
196. The order of contraction in muscle is
(a) Generation of action potential in muscle fibre
(b) Release of neuro transmitter at motor end plate
(c) Formation of cross linkages between actin and myosin
(d) Release of Ca^{2+} and binding to troponin C
(1) a ® b ® c ® d (2) b ® a ® d ® c
(3) b ® c ® a ® d (4) a ® d ® b ® c
197. Which of the following is not true of cellulose
(1) It is the most abundant organic compound on Earth
(2) It differs from starch because of the configuration of glucose and the geometry of the glycosidic linkage
(3) Few organisms have enzymes that hydrolyze its glycosidic linkage

(4) Its monomers are amino sugars

198. Polymerization is a process that

- (1) creates bonds between amino acids in the formation of a peptide chain
- (2) links the phosphate of one nucleotide with the sugar of the next
- (3) requires a condensation reaction
- (4) involves all of the above

199. Contractile elements of muscle cells are

- (1) intermediate filaments
- (2) centrioles
- (3) microtubules
- (4) actin filaments

200. Proteins to be used within the cytosol are generally synthesized

- (1) by ribosomes bound to rough ER
- (2) by free ribosomes
- (3) by the nucleolus
- (4) within the Golgi apparatus