



201. The animal that has 19 body segments, 6 pairs of appendages and respire through the trachea is
a) Spider b) Prawn c) Scorpion d) Head louse
202. In the heart of rabbit, the mitral valve is attached to the papillary muscles by
a) Chordae tendinae b) Purkinje fibres c) Columnae carneae d) Bundle of His
203. Body forms present in Cnidarians are
a) Cylindrical and umbrella-shaped
b) Corals and coral reefs
c) Polyp and medusa
d) Cnidoblasts and nematocytes
204. The adhesive pads (soft-pads) present in the legs of cockroach are
a) Galea b) Lacinia c) Glossa d) Plantulae
205. Regeneration in *Hydra* will be faster, if it is cut off from
a) Tentacles b) Hypostome c) Base d) All of these
206. Which of the following statements are true/false?
I. In higher phyla cellular level of organisation is seen
II. Phylum-Platyhelminthes have cellular level of organisation
III. Cellular level of organisation is seen when the cells are not arranged as loose cell aggregates
IV. Molluscs exhibit tissue level of organisation
Choose the correct option of the following
a) I and II are true, but III and IV are false b) All statements are false
c) All statements are true d) III and IV are true, but I and II are false
207. Solenocytes and nephridia are respectively found in
a) Platyhelminthes and Annelida b) Annelida and Nematoda
c) Cnidaria and Mollusca d) Mollusca and Echinodermata
208. Select the correct order of classification of *Rana tigrina* upto genus.
a) Chordate, Craniata, Amphibia, Gnathostomata, *Rana*
b) Chordate, Craniata, Gnathostomata, Amphibia, *Rana*
c) Chordate, Amphibia, Gnathostomata, Craniata, *tigrina*
d) Chordate, Craniata, Amphibia, Gnathostomata, *tigrina*
209. An animal without anus is
a) *Unio* b) *Pheretima* c) *Fasciola* d) *Periplaneta*
210. Aves are divided into the following sub-classes
a) Neornithes and Anasbrnithes b) Archaeornithes and Anguis
c) Archaeornithes and Neornithes d) Anguis and Anasbrnithes
211. Cnidarias are divided into the following classes
a) Hydrozoa, Desmospongia and Scyphozoa b) Actinozoa, Scyphozoa and Anthozoa

- c) Scyphozoa, Anthozoa and Hydrozoa d) None of the above
212. Which of the following is properly matched?
 a) Platyhelminthes – Trematoda – *Planaria* b) Echinodermata – Asterozoa – Star fish
 c) Arthropoda – Insecta – Spider d) Mollusca – Cephalopoda – *Unio*
213. Correctly matched set of phylum, class and example is
 a) Protozoa-Mastigophora-*Entamoeba* b) Mollusca-Bivalvia-*Pinctada*
 c) Arthropoda-Diplopoda-*Scolopendra* d) Chordata-Cyclostomata-*Phrynosoma*
214. Which one is harmful insect among the following?
 a) *Apis* b) *Pyrilla* c) *Tachardia* d) *Antheraea*
215. Blood vascular system of earthworm is
 a) Open type with Hb in RBC b) Open type with Hb in plasma
 c) Closed type with Hb in RBC d) Closed type with Hb in plasma
216. Polyp phase is absent in
 a) *Hydra* b) *Aurelia* c) *Physalia* d) *Obelia*
217. Platyhelminthes are also called
 a) Roundworms b) Flatworms c) Ringworms d) Hookworms
218. Cilia of gills of bivalve molluscs help in
 a) Feeding b) Digestion c) Reproduction d) Excretion
219. In rabbit, placenta is formed by
 a) Chorion allantoic membrane and yolk sac b) Amnion, chorion and yolk sac
 c) Chorion allantoic membrane and endometrium d) Allantois and endometrium
220. Choose the correct statement associated with ovoviviparous condition
 a) When the embryo directly derives nourishment from the mother
 b) The animals lay egg in a nest especially made for this purpose
 c) The eggs are heavily yolked eggs
 d) None of the above
221. A sponge harmful to oyster industry is
 a) *Cliona* b) *Euspongia* c) *Hyalonema* d) *Spongilla*
222. The arthropods exoskeleton is composed of
 a) Several kinds of polysaccharides
 b) Layers of proteins and a polysaccharide called chitin
 c) Several kind of proteins
 d) Single complex protein called arthropodin
223. Nephridia of earthworm are performing same functions as
 a) Gills of prawn b) Flame cells of *Planaria*
 c) Trachea of insects d) Nematoblasts of *Hydra*
224. Choose the correct option
 a) Phylum-Mollusca is the third largest phylum
 b) Phylum-Arthropoda is the second largest phylum
 c) Phylum-Mollusca is the largest phylum
 d) Phylum-Arthropoda is the largest phylum of Animalia
225. If *Hydra* is cut transversely in three equal parts, then
 a) All three parts will die b) Regeneration will occur in all the three parts

- c) Regeneration will occur only in anterior part d) Regeneration occur only in middle part
226. The centrum of VIII vertebra of frog is
 a) Procoelous b) Heterocoelous c) Amphicoelous d) Opisthocoelous
227. The cells that help in excretion in *Fasciola* are called
 a) Choanocytes b) Nematocytes c) Nephridia d) Flame cells
228. Food storage in *Leucosolenia* occurs by
 a) Ostia b) Osculum c) Thesocytes d) Spongocoel
229. Sperms in *Ascaris* are characterized by one unusual feature, *i.e.*,
 a) Long form b) Lack of flagellum
 c) Motility d) Ability to induce meiosis in egg
230. Male *Anopheles* does not transmit malarial parasite because
 a) It catches fever b) It is too small to carry parasite
 c) The parasite is killed in its stomach d) It does not drink blood
231. Characteristic feature of phylum-Echinodermata is
 a) Radial symmetry
 b) Water vascular system
 c) Mantle cavity
 d) All of these
232. In housefly, pseudotracheae is found in
 a) Haustellum b) Rostrum c) Labellum d) None of these
233. A sagittal section
 a) Passes dorsoventrally to the anteroposterior axis of the body
 b) A transverse section passing through the middle of the body
 c) Passes along the length perpendicular to the dorsoventral axis of the body
 d) A vertical section passing through the middle line of the body
234. Insects are different from spiders in which of the following features
 a) Presence or absence of wings, number of legs, presence or absence of haemocoel
 b) Presence or absence of antennae, number of germ layers, presence or absence of appendages
 c) Number of body divisions, number of leg, absence or presence of spinnerels
 d) None of the above
235. The movement or locomotion in Aschelminthes is due to
 a) Calcareous skeleton b) Siliceous skeleton c) Hydro skeleton d) Exoskeleton
236. Which of the following insect is not of any economic benefit?
 a) Silkworm b) Lac insect c) Locust d) Honey bee
237. Age of fishes is also known as
 a) Permian era b) Silurian era c) Devonian era d) Ordovician era
238. The skeleton of animals belonging to phylum-Porifera are made up of
 a) Spicules b) Spiracles c) Spines d) Spongocytes
239. In *Pheretima*, the red coloured round bodies in 4th, 5th and 6th segment above the alimentary canal are believed to be involved in
 a) Reproduction b) Digestion c) Excretion d) Leucocyte production
240. Scales are found in

- a) Pisces b) Rabbit c) Human d) Rat
241. Body cavity of adult *Ascaris* is
 a) Haemocoel b) Amphicoel c) Pseudocoel d) Schizocoel
242. If a snake is identified to be having large hexagonal vertebral and the dorsal surface and bluish with narrow white streaks, it is
 a) *Echis carinata* b) *Bungarus coeruleus* c) *Viper russelli* d) *Hemibungarus*
243. In coelomates, the problem of diffusion of food from gut to tissues is solved by
 a) The presence of coelomic fluid. b) Churning the food within the body cavity.
 c) Developing a circulatory system. d) Developing gut associated glands.
244. The generic name of tusk shell is
 a) *Dentalium* b) *Chaetoderma* c) *Chiton* d) *Neopilina*
245. Which statement is incorrect about members of phylum-Porifera?
 a) Have cellular level of organisation
 b) Have separate sexes
 c) Sexual reproduction takes place by gamete formation
 d) Have a water canal system
246. Which of the following features are present in chordates?
 a) Dorsal heart, presence of post-anal tail and central nervous system in dorsal b) Ventral heart, presence of post-anal tail and presence of gill slits
 c) Dorsal heart, pharynx perforated by gill slits and dorsal ventral system d) Ventral heart, absence of notochord but presence of post-anal part of the tail
247. Which of the following assists in the locomotion of the organism stated?
 a) Epithelium of *Pheretima* b) Trichocysts of *Paramecium*
 c) Pedicellaria of star fish d) Posterior sucker of *Hirudinaria*
248. The dorsal diverticulum of urethra in male rabbit is
 a) Uterus b) Uterus masculinus c) Prepuse d) Vas deferens
249. Which is not correctly matched?
 a) Annelida –Enterocoelomate b) Platyhelminthes –Acoelomate
 c) Arthropoda – Schizocoelomate d) Nematelminthes –Pseudocoelomate
250. Fertilized eggs of *Periplanata Americana* are encased in
 a) Ootheca b) Cocoon c) Genital chamber d) Phallomere
251. In the life cycle of mosquito, comma-shaped stage is
 a) Larval stage b) Pupal stage c) Imago stage d) None of these
252. *Hemicyclops* belongs to the class
 a) Cyclostomata b) Ostracodermi c) Gnathostomata d) Pisces
253. Nephridia in *Pheretima* are formed from
 a) Mesenchyme b) Endoderm c) Mesoderm d) Ectoderm
254. Leech secretes, which of the following anticoagulants?
 a) Hirudin b) Heparin c) Serotonin d) Histamine
255. Which character is found only in mammals?
 a) Neck b) Diaphragm c) Optic lobes of brain d) Tail
256. Organ of mastication in cockroach is
 a) Labrum b) Labium c) Mandibles d) Maxilla
257. Which of the following blood vessels is the largest in earthworm and possess valves?
 a) Dorsal blood vessel b) Sub-neural blood vessel

- c) Ventral blood vessel
d) Supra oesophageal blood vessels
258. The dioecious animal is
a) Liver fluke b) Hook worm c) Tapeworm d) Earthworm
259. Metameric segmentation is the characteristic of
a) Platyhelminthes and Arthropoda b) Echinodermata and Annelida
c) Annelida and Arthropoda d) Mollusca and Chordata
260. The taste receptors of cockroach are
a) Compound eyes b) Campaniform sensillae
c) Palps of maxillary and labium d) Tactile hairs
261. Which of the following groups includes only arthropods?
a) Prawn, *Schistosoma*, *Planaria* b) Cockroach, scorpion, prawn
c) *Chiton*, *Neopilina*, scorpion d) *Chiton*, prawn, cockroach
262. Chitin is a
a) Lipid b) Protein c) Polysaccharide d) Sphingomyelin
263. Pheromone is
a) A product of endocrine gland b) Used for animal communication
c) mRNA d) Always protein
264. The velocity of conduction of nerve impulse in frog is
a) 300 ms^{-1} b) Same as of electricity
c) Faster than sound d) 30 ms^{-1}
265. Mark what is incorrect regarding to the phylum-Arthropoda
a) Open type of circulatory system
b) Bilaterally symmetrical, coelomate animals
c) Diploblastic with head, thorax and abdomen
d) Presence of Malpighian tubules and antennae
266. The migrating birds rely on the
a) Anaerobic oxidation of proteins b) Highly efficient aerobic oxidation of fats
c) Anaerobic oxidation of carbohydrates d) All of the above
267. Choose a limbless amphibian from the list given below
a) Salamander b) *Necturus* c) *Ichthyopsis* d) All of these
268. Which structure is not related to respiration in frog?
a) Diaphragm b) Skin c) Buccal cavity d) Lungs
269. Which of the following sets of characters are applicable in metamorphosis of tadpole larva of frog and toads?
a) Reabsorption of gills and reabsorption of tail
b) Reabsorption of gills and lengthening of tail
c) Complete development of gills and reabsorption of tail
d) Complex development of gills and lengthening of tail
270. Study the following in *Pheretima*.
I. Dorso intestinal blood vessels
II. External intestinal plexus
III. Internal intestinal plexus
IV. Ventro intestinal blood vessel
Arrange the blood vessels in correct sequence of blood flow from ventral blood vessel to dorsal blood vessel.

- The correct sequence is
 a) IV → II → I → III b) III → I → II → IV c) II → III → IV → I d) IV → II → III → I
271. The peculiar pungent smell of cockroach is produced by the secretion of
 a) Pheromones b) Flame cells c) Abdominal glands d) Cervical glands
272. Metamorphosis in cockroach is regulated by
 a) Corpora cardiaca b) Brain c) Thyroid d) Corpora allata
273. Which of the following is a flightless bird?
 a) Ostrich b) Emu c) Kiwi d) All of these
274. Gill is monopectinate in
 a) *Unio* b) *Chiton* c) *Octopus* d) *Pila*
275. Bioluminescence is well marked in
 a) Flatworms b) Ctenophores c) Cnidarians d) Aschelminthes
276. Identify the correct pair of birds with a raft-like keel and lacking preen gland and syrinx
 a) *Tinamus* and *Apteryx* b) *Rhea* and *Dromeous*
 c) *Casuaris* and *Struthio* d) *Kiwi* and *Rhea*
277. Sponges are
 a) Pelagic b) Free-swimming c) Planktonic d) Sessile
278. Which of the following has exoskeleton of scales and paired copulatory organ penis?
 a) Sharks b) Lizards c) Urodela d) Urochordata
279. An acoelomate animal with bilateral symmetry, is
 a) *Hydra* b) Liver fluke c) *Physalia* d) *Obelia*
280. All chordates have the following characteristics
 a) Bilaterally symmetrical, presence of _____
 coelom, triploblastic, closed or open
 circulatory system
 b) Bilaterally symmetrical, presence of _____
 coelom, diploblastic or triploblastic
 c) Open circulatory system, diploblastic or
 triploblastic, coelom and bilaterally
 symmetrical
 d) Bilaterally symmetrical, coelom, present,
 triploblastic with closed circulatory system
281. In *Rattus rattus*, internally cerebral hemisphere are connected by
 a) Corpus striatum b) Corpus cardiacum c) Corpus callosum d) Corpus allatum
282. A triploblastic, pseudocoelomate, bilaterally symmetrical human parasite, which is
 oviparous and the transmission is by contact. It is
 a) Filarial worm b) Hook worm c) Palalo worm d) Tape worm
283. *Ascaris* is found in
 a) Body cavity b) Lymph nodes c) Tissue d) Alimentary canal
284. Common characteristic of mosquitoes, houseflies and cockroaches are
 a) One pair each of wings and halteres
 b) Three pair of legs and one pair of developed wings
 c) Two pair of legs and two compound eyes
 d) Compound and simple eyes
285. About how many times does the nymph of the *Periplaneta americana* undergo moulting
 before becoming an adult?
 a) 4 b) 2 c) 17 d) 3
286. Jacobson's organs which are additional olfactory organs are present in
 a) Rat b) Snakes c) Man d) All of these

287. Stink gland is found in
- a) 4th and 5th terga of cockroach
 - b) 5th and 6th terga of cockroach
 - c) 5th and 6th sterna of cockroach
 - d) 4th and 5th sterna of cockroach
288. In the 4th, 5th and 6th segments of earthworm, lying above pharyngeal mass and connected with pharyngeal glands are found small, red coloured follicular bodies called
- a) Septal glands
 - b) Blood glands
 - c) Salivary glands
 - d) Nephridia
289. Different colours of frog skin are controlled by
- a) Hormones
 - b) Melanocytes
 - c) Nervous system
 - d) Both (a) and (c)
290. Which of the following is not true regarding phylum-Coelenterata?
- a) They are diploblastic animals
 - b) They have cellular level of organisation
 - c) They have nematocyte cells present on the tentacles
 - d) The gastro-vascular opening is called the hypostome
291. *Hydra* captures the victim by injecting the chemical
- a) Kaliotoxin
 - b) Hypnotoxin
 - c) Toxoplasmin
 - d) Sarafotoxin
292. In *Ascaris*, the coelom is
- a) Schizocoelom
 - b) Pseudocoelom
 - c) True coelom
 - d) Haemocoelom
293. The feet with toes forming cloven hoof is seen in
- a) Horse
 - b) Zebra
 - c) Rhinoceros
 - d) Sheep
294. *Petromyzon* belongs to
- a) Agnatha
 - b) Gnathostomata
 - c) Protochordata
 - d) Euchordata
295. The second largest aquatic vertebrate is
- a) Blue whale
 - b) Whale shark
 - c) Sea elephant
 - d) Dugongs
296. In insects which feed on nectar, the proboscis is formed by
- a) Hypopharynx
 - b) Mandibles
 - c) Glossa
 - d) Labrium
297. In *Hydra*, the beaded processes of sensory cells make synapsis with the process of
- a) Nerve cell
 - b) Epithelio-muscular cell
 - c) Both (a) and (b)
 - d) None of the above
298. In which of the following phyla, while the adult shows radial symmetry, the larva shows bilateral symmetry?
- a) Annelida
 - b) Arthropoda
 - c) Mollusca
 - d) Echinodermata
299. Which one of the following is not the characteristic feature of frog?
- a) The skin is moist and slimy
 - b) Each of the fore limbs and hindlimbs end in five digits
 - c) Hepatic portal and renal portal systems are present
 - d) Skin, buccal cavity and lungs are the respiratory organs
300. *Trygon* has
- a) Two chambered heart
 - b) The males have claspers
 - c) Presence of gill slits
 - d) All of the above