



- a) *Pila* sp                      b) *Chiton* sp                      c) *Lamellidens* sp                      d) *Pinctada* sp
418. In which animal, diaphragm has no role in respiration?  
a) Frog                      b) Rat                      c) Camel                      d) Rabbit
419. Which one of the following phyla is correctly matched with its two general characteristics?  
a) Arthropoda                      – Body divided into head, thorax and abdomen and respiration by tracheae  
b) Chordate                      – Notochord at some stage and separate anal and urinary openings to the outside  
c) Echinodermata                      – Pentamerous radial symmetry and mostly internal fertilization  
d) Mollusca                      – Normally oviparous and development through a trochophore or veliger larva
420. The class name-Reptilia refers to  
a) They have scales or scutes presence on the body  
b) They shed their skin and undergo moulting  
c) They have creeping or crawling mode of locomotion  
d) None of the above
421. 'Turbellarians' are free living  
a) Nematodes                      b) Cestodes                      c) Flatworms                      d) Trematodes
422. Which of the following belongs to the class-Amphineura?  
a) *Chiton*                      b) *Nautilus*                      c) *Dentalium*                      d) *Pinctada*
423. The male cockroach can be identified by the presence of  
a) Collateral gland                      b) Green gland                      c) Broad abdomen                      d) Anal style
424. Which of the following is a catadromous fish?  
a) *Hilsa* sp                      b) *Mystus* sp                      c) *Anguilla* sp                      d) *Channa* sp
425. What is the scientific name of pinworm of man?  
a) *Trichinella spiralis*                      b) *Dracunculus medinensis*  
c) *Trichuris trichuria*                      d) *Enterobius vermicularis*
426. *Fasciola hepatica* is a digenetic parasite. Sheep and snail are two hosts. Snail is  
a) Intermediate host                      b) Paratenic host                      c) Vector host                      d) Reservoir host
427. The number of trigeminal nerve in frog is  
a) 4<sup>th</sup>                      b) 5<sup>th</sup>                      c) 8<sup>th</sup>                      d) 9<sup>th</sup>
428. Animals are classified on the basis of which of the following features?  
I. Coelomic cavity                      II. Level of organisation  
III. Notochord                      IV. Skeletal structure  
a) I and II                      b) I and III                      c) I, II and III                      d) II and IV
429. Pylangium in frog is found in  
a) Conus arteriosus                      b) Sinus venosus                      c) Atrium                      d) Ventricle
430. Select the group of animals that have a protostomous plan  
a) *Culex*, *Dugesia*, *Aurelia*                      b) *Ancylostoma*, *Limulus*, *Physalia*  
c) *Apis indica*, *Loligo*, *Hirudinaria*                      d) *Ophiothrix*, *Rhabdopleura*, *Antedon*
431. *Hydra* possesses  
a) One testis and one ovary                      b) One testis and many ovaries  
c) Many testes and many ovaries                      d) Many testes and one ovary
432. Which one of the following is an exotic carp species?  
a) *Barbus stigma*                      b) *Cyprinus carpio*                      c) *Labeo bata*                      d) *Cirrhinus mrigala*

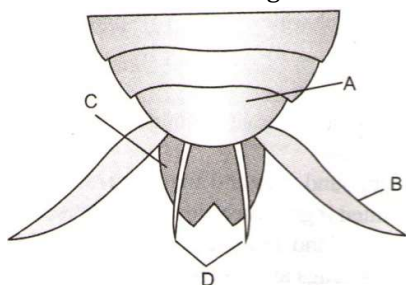
433. A temporary, ectoparasitic, nocturnal insect with piercing and sucking type of mouth parts is  
a) *Pediculus*                      b) *Cimex*                      c) *Tachardia*                      d) *Musca*
434. The unique character of animals belonging to class-Mammalia is  
a) Only mammals possess hair on skin  
b) Completely four chambered heart  
c) Presence of mammary glands  
d) Fertilisation is internal
435. Select the prosimians from the given options  
a) Lemurs, monkey and gibbons                      b) Chimpanzee, monkey and loris  
c) Tarsius, lemur and loris                      d) Chimpanzee, gibbons and orangutan
436. Hormone responsible for metamorphosis in tadpole is  
a) Adrenaline                      b) Thyroxine                      c) Aldosterone                      d) Vasopressin
437. Which of the following animals has a true coelom?  
a) *Ascaris*                      b) *Pheretima*                      c) *Sycon*                      d) *Taenia solium*
438. Right aortic arch is present in  
a) Reptiles only                      b) Mammals only                      c) Birds only                      d) Both (b) and (c)
439. The type of asexual reproduction found in *Hydra* is  
a) Multiple fission                      b) Budding                      c) Sporulation                      d) Binary fission
440. Neopallium is found in the brain of  
a) Amphibian                      b) Advanced reptiles                      c) Mammals                      d) Both (b) and (c)
441. Insects have  
a) 2 pairs of legs                      b) 3 pairs of legs                      c) 4 pairs of legs                      d) 1 pair of legs
442. Which is not in pair in rabbit?  
a) Azygous vein                      b) Hemizygous vein                      c) Caudal vein                      d) All of these
443. The golden age of reptiles was  
a) Proterozoic era                      b) Palaeozoic era                      c) Mesozoic era                      d) Coenozoic era
444. *Schistosoma* is a parasite found in  
a) Testes of frog                      b) Liver                      c) Intestine                      d) Blood
445. Which of the following characters are present in class-Crustacea?  
a) Cephalothorax, gills and appendages                      b) Head and thorax, gills and appendages  
c) Cephalothorax, book gills and appendages                      d) Head and thorax, book gills and appendages
446. Pseudocoelom is not found in  
a) *Ascaris*                      b) *Ancylostoma*                      c) *Fasciola*                      d) None of these
447. The skull of frog is  
a) Tricondylic                      b) Monocondylic                      c) Dicondylic                      d) Non-condylic
448. Earthworms have no skeleton, but during burrowing the anterior end becomes turgid and acts as a Hydraulic skeleton. It is due to  
a) Coelomic fluid                      b) Blood                      c) Gut peristalsis                      d) Setae
449. *Dugesia* belongs to which class  
a) Trematoda                      b) Cestoda                      c) Turbellaria                      d) None of these
450. What is true for *Wuchereria bancrofti*?  
a) Absence of an intermediate host                      b) Male worms are longer than female worms  
c) Lives in bile ducts of human beings                      d) Seen in lymph of humans

451. Identify the group, which includes animals all of which give birth to young ones directly.
- a) Dolphin, kangaroo, bat, cat  
 b) *Platypus*, penguin, bat, hippopotamus  
 c) Shrew, bat, kiwi, cat  
 d) Lion, whale, ostrich, bat

452. Skeletal system in phylum-Arthropoda is

- a) Endoskeletal spicules structures  
 b) Endoskeletal siliceous structures  
 c) Exoskeletal calcareous covering  
 d) Exoskeletal chitinous covering

453. The diagram represents the reproductive organ of male cockroach. Choose the correct combination of labeling



- a) A – 8<sup>th</sup> Sternum, B – Anal cercus, C – 10<sup>th</sup> tergum, D – Anal styles  
 b) A – 10<sup>th</sup> tergum, B – Anal cercus, C – Anal styles, D – Sternum  
 c) A – Anal styles, B – Anal cercus, C – 10<sup>th</sup> Tergum D – 8<sup>th</sup> Sternum  
 d) A – 8<sup>th</sup> Sternum, B – Anal cercus, C – 10<sup>th</sup> Tergum, D – 8<sup>th</sup> Sternum

454. Coxal glands are excretory organs in

- a) Birds  
 b) Scorpions  
 c) Porifers  
 d) Annelids

455. Which of the following requires an invertebrate intermediate host?

- I. *Dugesia*  
 II. *Schistosoma*  
 III. *Echinococcus*  
 IV. *Ancylostoma*  
 V. *Wuchereria*

- a) III and IV  
 b) II and V  
 c) III and V  
 d) I and IV

456. Each male genital opening of *Pheretima* has separate openings of

- a) Two ducts  
 b) Three ducts  
 c) Five ducts  
 d) Four ducts

457. Which insect is useful for us?

- a) *Periplaneta*  
 b) *Musca*  
 c) *Bombyx*  
 d) Mosquitoes

458. To which taxonomic group does whale belong to?

- a) Fishes  
 b) Reptiles  
 c) Arthropoda  
 d) Mammals

459. Flame cells are excretory organ of

- a) *Planaria*  
 b) *Hydra*  
 c) *Hydrilla*  
 d) Cockroach

460. Which of the following is true about hookworms?

- a) Fertilisation is external  
 b) Presence of excretory tube and excretory pore  
 c) Triploblastic and acoelomate animals  
 d) Hermaphrodites

461. Acoustic spots in frog are present in

- a) Osseous labyrinth  
 b) Carotid  
 c) Membranous labyrinth  
 d) All of these

462. Venom of viper affects

- a) Nervous system  
 b) Circulatory system  
 c) Respiratory system  
 d) None of these

463. What is common among silver fish, scorpion, crab and honey bee?  
 a) Compound eyes      b) Poison glands      c) Jointed appendages      d) Metamorphosis
464. The function of clitellum in *Pheretima* is  
 a) Formation of cocoon      b) Secretion of hormone  
 c) Nutrition of sperm      d) Respiration
465. Select the phylum that is neither bilaterally symmetrical nor radially symmetrical nor radially symmetrical  
 a) Ctenophora      b) Coelenterata      c) Porifera      d) Annelida
466. *Hydra* recognizes its prey by  
 a) Nematocyst      b) Some special organs  
 c) Chemical stimulus of prey      d) Mechanical stimulus of prey
467. Which one has no intermediate host?  
 a) *Taenia*      b) *Ascaris*      c) *Fasciola*      d) *Plasmodium*
468. Which is true for honeybee?  
 a) Queen is sterile haploid female      b) Workers are diploid males and females  
 c) Bee hive has four types of bees      d) Drones are haploid fertile males
469. Shell of molluscs is derived from  
 a) Foot      b) Mantle      c) Ctenidia      d) Placoid
470. Rabbit is  
 a) Carnivore      b) Herbivore      c) Both (a) and (b)      d) Sanguivore
471. Choose the animals that belong to phylum-Echinodermata from the options  
 a) Sea urchin, cuttle fish and sea lily  
 b) *Echinus*, sea hare and sea cucumber  
 c) Antedon, *Ophiura* and *Echinus*  
 d) *Ophiura*, *Chaetopleura* and *Echinus*
472. The animal's body belonging to phylum-Mollusca is divided into  
 a) Head, thorax and abdomen      b) Head, muscular foot and abdomen  
 c) Head, thorax and visceral hump      d) Head, muscular foot and visceral hump
473. Wiggler is the larva of  
 a) Mosquito      b) Butterfly      c) Housefly      d) Cockroach
474. Addition of which element in water speed up the metamorphosis in frog tadpole larva?  
 a) I<sub>2</sub>      b) K      c) Na      d) Cl
475. Phylum that exhibit radial or radial like symmetry are  
 a) Coelenterates      b) Echinoderms      c) Ctenophores      d) All of these
476. Characteristic symptom of ancylostomiasis is  
 a) Gastro-intestinal disturbance      b) Anaemia  
 c) Nervous disorders      d) All of the above
477. Characteristic cells of *Hydra* are  
 a) Archaeocytes      b) Thesocytes      c) Cnidoblasts      d) Trophocytes
478. The nitrogenous metabolic waste in *Hydra* is mostly  
 a) Ammonia and is removed from whole surface of body  
 b) Urea and is removed mainly by tentacles  
 c) Urea and is removed from whole surface of body  
 d) Uric acid and is removed from whole surface of body
479. The echinoderms are

- a) Arboreal insects    b) Marine animals    c) Terrestrial insects    d) Freshwater worms
480. List the phyla in the correct order of their placement in classification  
 I. Chordata    II. Annelida  
 III. Arthropoda    IV. Platyhelminthes  
 V. Ctenophora    VI. Aschelminthes  
 a) VI, I, V, IV, III, II    b) II, III, IV, V, VI, I    c) V, IV, VI, II, III, I    d) III, II, VI, I, V, IV
481. Superposition image formation takes place in cockroach during  
 a) Bright light    b) Diffused light    c) Dim light    d) None of these
482. Which of the following has enterocoelomate invertebrate?  
 a) Echinodermata    b) Arthropoda    c) Annelida    d) Mollusca
483. Which of the following is the character of dorsal blood vessel of the earthworm?  
 a) Collecting in the whole body    b) Collecting in first 13 segments  
 c) Distributing in the whole body    d) Distributing in the first 13 segments
484. Which one is correct?  
 a) Notochord is ectodermal in origin present in some animals  
 b) Notochord is a mesodermally derived rod like structure formed on the dorsal side in embryonic development in some animals  
 c) Arthropoda are non-chordates  
 d) Both (b) and (c)
485. Mammal's heart is  
 a) Myogenic    b) Neurogenic    c) Voluntary    d) Sympathetic
486. Which of the following organs in earthworm neutralizes human acid present in humus?  
 a) Typhlosole    b) Calciferous glands    c) Intestinal caecum    d) Gizzard
487. Which one of the following is a matching pair of a body feature and the animal possessing it?  
 a) Post-anal tail – Octopus  
 b) Ventral central nervous system – Leech  
 c) Pharyngeal gill slits absent in embryo – *Chamaeleon*  
 d) Ventral heart – Scorpion
488. Notochord is  
 a) Endodermally derived structure, formed on the dorso ventral side  
 b) Ectodermally derived structure, formed on the dorsal side  
 c) Mesodermally derived structure, formed on the dorsal side  
 d) Mesodermally derived structure, formed on the ventral side
489. Some vertebrae in birds fuse to form  
 a) Sacrum    b) Synsacrum    c) Coccyx    d) None of these
490. Tube-within-tube body plan is found in which animal?  
 a) *Euspongia*    b) *Fasciola*    c) *Hydra*    d) None of these
491. WBCs of frog are  
 a) Nucleated amoeboid    b) Biconvex    c) Concave    d) Non-nucleated
492. Animals having a built in thermostat to maintain constant body temperature are known as  
 a) Biothermic    b) Poikilothermic    c) Oligothermic    d) Homeothermic
493. Which of the following is not a characteristic of snakes?  
 a) Eggs    b) Sternum    c) Scales    d) Kidney
494. Sea fan belongs to

- a) Coelenterata      b) Porifera      c) Echinodermata      d) Mollusca
495. Choanocyte is the characteristic feature of  
 a) Sponges      b) Arthropods      c) Annelids      d) None of these
496. Features common to the animals belonging to class-Amphibia and class-Reptilia are  
 a) Presence of scales with internal fertilisation and usually four chambered heart      b) Presence of tympanum, poikilotherms and usually three chambered heart  
 c) Presence of cloaca, oviparous and external fertilisation      d) Skin is moist
497. Two-chambered heart is a feature of  
 a) Amphibians      b) Fishes      c) Reptiles      d) Birds
498. Choose the cartilaginous fishes from the following  
 a) *Catla* and *Sawfish*  
 b) *Pristis* and *Carcharodon*  
 c) *Scoliodon* and Hagfish  
 d) *Trygon* and Lamprey
499. Which of the following is not correctly matched?  
 a) *Sycon* – Canal system      b) Starfish – Radial symmetry  
 c) *Ascaris* – Flame cell      d) Prawn – Haemocoel
500. Which of the following vertebrates show the formation of middle ear (eustachian recess) for the first time?  
 a) *Exocoetus*      b) *Rana*      c) *Echis*      d) *Hippocampus*

