In earthworm, the characteristic internal median fold of dorsal wall of the intestine called typhlosole is present in  
(a.) 5 to 9 segments  
(b.) 9 to 14 segments  
(c.) 26 to 35 segments  
(d.) 15 to last segment

The dioecious animal is  
(a.) Liver fluke  
(b.) Hook worm  
(c.) Tapeworm  
(d.) Earthworm

Identify the figure and and choose the correct option

![](data:application/octet-stream;base64,)

1- Female Ancylostoma  
2- Female Ascaris  
3- Male Taenia  
4- Female Wuchereria  
5- Male Ancylostoma  
6- Male Ascaris  
A B  
(a.) 23  
(b.)   
(c.)   
(d.)

Which of the following is common in Annelida and Arthropoda?  
(a.) Basal nerve cord  
(b.) Dorsal nerve cord  
(c.) Ventral nerve cord  
(d.) Anterior nerve cord

Chondrichthyes is characterized by  
(a.) Placoid scale  
(b.) Ventral mouth  
(c.) Ctenoid scale and ventral mouth  
(d.) Placoid scale and ventral mouth

Asymmetry in Gastropoda is due to  
(a.) Torsion  
(b.) Coiling  
(c.) Twisting  
(d.) None of these

A temporary, ectoparasitic, nocturnal insect with piercing and sucking type of mouth parts is  
(a.) Pediculus  
(b.) Cimex  
(c.) Tachardia  
(d.) Musca

Body cavity of Hydra is called  
(a.) Haemocoel  
(b.) Coelenteron  
(c.) Enterocoel  
(d.) Pseudocoel

Schistosoma is a parasite found in  
(a.) Testes of frog  
(b.) Liver  
(c.) Intestine  
(d.) Blood

Match the items labelled A, B, C and D in the given diagram with the given characters and choose the correct answer

![](data:application/octet-stream;base64,)

I. Nerve cord  
II. Post-anal part  
III. Notochord  
IV. Gill Slits  
A B C D  
(a.) II IV III I  
(b.) I III II IV  
(c.) III I IV III  
(d.) IV II III I

Cerebral hemispheres of rat are connected by  
(a.) Corpus luteum  
(b.) Corpus callosum  
(c.) Corpus albicans  
(d.) Corpus spongiosum

Which one of the following parasites shows alternation of generation and alternation of host in its life cycle?  
(a.) Fasciola  
(b.) Ascaris  
(c.) Wuchereria  
(d.) Taenia

Which of the following is a crustacean?  
(a.) Prawn  
(b.) Snail  
(c.) Sea anemone  
(d.) Hydra

Which of the following animals sows discontinuous distribution?  
(a.) Green muscle  
(b.) Bats  
(c.) Lung fish  
(d.) Pacific salmon

Ink glands are found in  
(a.) Sponge  
(b.) Star fish  
(c.) Sepia  
(d.) Jelly fish

Arms are absent in  
(a.) Sea urchin  
(b.) Sea cucumber  
(c.) Both (a) and (b)  
(d.) None of these

Which of the following groups of animals have the following feature?  
I. Diploblastic  
II. Acoelomate  
III. Radial symmetry  
(a.) Planaria, Physalia, Aurelia  
(b.) Taenia, Fasciola, Wuchereria  
(c.) Adamsia, Berore, Meandrina  
(d.) Fasciola, Sycon, Sea walnut

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

Ascaris is found in  
(a.) Body cavity  
(b.) Lymph nodes  
(c.) Tissue  
(d.) Alimentary canal

The excretory organs in prawn are  
(a.) Kidneys  
(b.) Malpighian tubules  
(c.) Green glands  
(d.) Nephridia

A single opening of the digestive system is found in  
(a.) Protista  
(b.) Ctenophore  
(c.) Porifera  
(d.) Platyhelminthes

Which one of the following pairs of items correctly belongs to the category of organs mentioned against it?  
(a.) Thorns of Bougainvillea - Analogous organs and tendrils of Cucurbita  
(b.) Nictitating membrane and - Vestigial organs blind spot in human eye  
(c.) Nephridia of earthworm - Excretory organs and Malpighian tubules of cockroach  
(d.) Wings of honey bee and wings of crow Homologous organs

Blood of earthworm is  
(a.) Red in colour, due to dissolved haemoglobin in corpuscle  
(b.) Red in colour, due to dissolved haemoglobin in plasma  
(c.) Blue in colour, due to dissolved haemocyanin in plasma  
(d.) Blue in colour, due to dissolved haemocyanin in corpuscles

Addition of which element in water speed up the metamorphosis in frog tadpole larva?  
(a.)   
(b.) K  
(c.) Na  
(d.) Cl

Mosquito receive air through  
(a.) Flagellum  
(b.) Cilia  
(c.) Pedicel  
(d.) None of these

Which of the following phyla has no freshwater forms?  
(a.) Echinodermata  
(b.) Mollusca  
(c.) Chordata  
(d.) Porifera

Which one of the following has an open circulatory system?  
(a.) Pheretima  
(b.) Periplaneta  
(c.) Hirudinaria  
(d.) Octopus

Differentiated embryonic layers are called  
I. ectoderm II. Endoderm  
III. Mesoderm III. Mesoglea  
(a.) I, II and IV  
(b.) I, II and III  
(c.) II, III and IV  
(d.) I, III and IV

Which of the following is correctly states as it happens in the common cockroach?  
(a.) Oxygen is transported by haemoglobin in blood  
(b.) Nitrogenous excretory product is urea  
(c.) The food is ground by mandibles and gizzard  
(d.) Malpighian tubules are excretory organs projecting out from the colon

The female genital pores of Pheretima posthuma located upon the segment  
(a.)   
(b.)   
(c.)   
(d.)

Members of this phylum exhibit adaptations to widely varied environmental conditions. Identify the phylum  
(a.) Porifera  
(b.) Coelenterata  
(c.) Echinodermata  
(d.) Mollusca

The anterior V-spot in microfilaria of Wuchereria represents  
(a.) Nerve ring  
(b.) Cervical papilla  
(c.) Excretory system  
(d.) Reproductive system

Which of the following can regenerate entire alimentary canal?  
(a.) Amphibian  
(b.) Fish  
(c.) Sea cucumber  
(d.) Birds

Cross fertilisation is favoured by  
(a.) Neoteny  
(b.) Metagenesis  
(c.) Protandry  
(d.) None of these

Which is the smallest known bird?  
(a.) Artic Tern  
(b.) Hoopoe  
(c.) Streptopelia  
(d.) Bee humming bird

In rabbit, foliate papillae are  
(a.) Situated on the margin of tongue  
(b.) Situated on the upper surface of tongue  
(c.) Situated at the base of tongue  
(d.) Situated at the sides of the base of the tongue

Which one of the following statements about all  
the four of Spongilla, leech, dolphin and penguin is correct?  
(a.) Penguin is homeothermic, while the remaining three are poikilothermic  
(b.) Leech is a fresh water form, while all others are marine  
(c.) Spongilla has special collar cells called choanocytes, which are not found in the remaining three  
(d.) All are bilaterally symmetrical animals

The herbivorous insect that has piercing and sucking type of mouth parts is  
(a.) Cimex  
(b.) Culex  
(c.) Apis  
(d.) Tachardia

Which one of the following pairs of animal comprises 'jawless fishes'?  
(a.) Lampreys and eels  
(b.) Mackerals and rohu  
(c.) Lampreys and hag fishes  
(d.) Guppies and hag fishes

In cockroach, vision is due to  
(a.) One compound eye  
(b.) Two compound eyes  
(c.) Two simple eyes  
(d.) Two compound and two simple eyes

Phylum-Aschelminthes is different from phylumPlatyhelminthes in  
(a.) Symmetry  
(b.) Shape of the body  
(c.) Number of germ layers in embryonic stage  
(d.) None of the above

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

What is true about class-Insecta?  
(a.) Two pairs of wings  
(b.) One pair of wings  
(c.) Three pairs of jointed legs  
(d.) No wings

Choose the correct option  
(a.) Annelida - Exhibit bilateral symmetry, metamerism and coelom  
(b.) Echinodermata - Exhibit tissue level organisation and radial symmetry  
(c.) Arthropoda - Exhibit incomplete digestive system and segmentation  
(d.) Notochord is present on ventral side in vertebrate

Which of the following belongs to class-Insecta?  
(a.) Julus  
(b.) Silver fish  
(c.) Lobsters  
(d.) Prawn

The feet with toes forming cloven hoof is seen in  
(a.) Horse  
(b.) Zebra  
(c.) Rhinoceros  
(d.) Sheep

Which animal shows coprophagy?  
(a.) Giraffe  
(b.) Elephant  
(c.) Rabbit  
(d.) Snake

A group of animals having marsupium is  
(a.) Nonotremata  
(b.) Eutheria  
(c.) Metatheria  
(d.) Pantotheria

Which of the following groups of animals maintains high and constant body temperature such as mammals?  
(a.) Reptiles  
(b.) Amphibians  
(c.) Birds  
(d.) Fishes

In the heart of rabbit, the mitral valve is attached to the papillary muscles by  
(a.) Chordae tendinae  
(b.) Purkinje fibres  
(c.) Columnae carnease  
(d.) Bundle of His

Alteration of generation is also called  
(a.) Metamorphosis  
(b.) Metastasis  
(c.) Metazoan  
(d.) Metagenesis

Members of phylum-Porifera are  
(a.) Exclusively marine animals  
(b.) Exclusively freshwater animals  
(c.) Mostly freshwater animals but few are marine animals  
(d.) Mostly marine animals but few are freshwater animals

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

The group of anamniota includes  
(a.) Reptiles and birds  
(b.) Birds and mammals  
(c.) Fishes and amphibians  
(d.) Reptiles and mammals

The second largest number of species containing phylum in the animal kingdom is  
(a.) Annelida  
(b.) Arthropoda  
(c.) Mollusca  
(d.) Chordata

Flame cells are excretory organ of  
(a.) Planaria  
(b.) Hydra  
(c.) Hydrilla  
(d.) Cockroach

Which of the following display retrogressive metamorphosis?  
(a.) Salpa and Herdmania  
(b.) Doliolum and Oikopleura  
(c.) Pyrosoma  
(d.) All of these

Which of the following animal is called a living fossil?  
(a.) King locust  
(b.) Limulus  
(c.) Bombyx  
(d.) Balanoglossus

Which parasite is present in seminal vesicle of earthworm?  
(a.) Monocystis  
(b.) Nosema  
(c.) Sarcocystis  
(d.) Nictotherus

Insects are different from spiders in which of the following features  
(a.) Presence or absence of wings, number of legs, presence of absence of haemocoel  
(b.) Presence of 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

Botryoidal tissue is found in  
(a.) Hirudinea  
(b.) Polychaeta  
(c.) Oligochaeta  
(d.) All of these

Which of the following features is not found in Aves  
(a.) Preen glands on tail  
(b.) Crop and a gizzard  
(c.) Air cavities in bones  
(d.) Teeth inside the beak

Which of the following is observed in amphibians?  
(a.) Three chambered heart  
(b.) Cold blooded animals  
(c.) Absence of scales  
(d.) All of these

Pancreas is absent in which group of vertebrates?  
(a.) Reptiles  
(b.) Cyclostomates  
(c.) Birds  
(d.) Mammals

In which of the following reptiles four chambered heart is present?  
(a.) Lizard  
(b.) Snake  
(c.) Scorpion  
(d.) Crocodile

Which one of the following animals lay eggs yet the female secretes milk?  
(a.) Bat  
(b.) Kangaroo  
(c.) Platypus  
(d.) Ostrich

Ommatidia serve the purpose of photoreception in  
(a.) Humans  
(b.) Sunflower  
(c.) Cockroach  
(d.) Frog

Choose the cartilaginous fishes from the following  
(a.) Catla and Sawfish  
(b.) Pristis and Carcharodon  
(c.) Scoliodon and Hagfish  
(d.) Trygon and Lamprey

Hydroskeleton is not found in  
(a.) Mollusca  
(b.) Echinoderms  
(c.) Annelida  
(d.) Cnidarian

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

The level of organisation in Platyhelminthes is  
(a.) Cellular level  
(b.) Tissue level  
(c.) Organ level  
(d.) Organ-system level

The long bones are hollow and connected by air passage. These are characteristic of  
(a.) Mammalia  
(b.) Aves  
(c.) Reptilia  
(d.) Sponges

Which animals belong to sub-phylum Urochordata?  
(a.) Branchistoma and Lancelet  
(b.) Salpa and Lancelet  
(c.) Ascidia and Doliolum  
(d.) Salpa and Amphioxus

Petromyzon belongs to  
(a.) Agnatha  
(b.) Gnathostomata  
(c.) Protochordata  
(d.) Euchordata

The 'bilateral symmetry' refers  
(a.) When the body can be divided into two unequal halves on passing central axis through it  
(b.) To any plane passing through centre, which does not divide the body into equal halves  
(c.) When the body can be divided into identical left and right halves only in one plane  
(d.) Any plane passing through the central axis of the body dividing the organism into two equal halves

In Ophiuroidea, branched arms are seen in  
(a.) Gorgonocephalus  
(b.) Clypeaster  
(c.) Salmacis  
(d.) Gorgonia

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

Metachrosis is an animal's  
(a.) Ability to undergo transformation  
(b.) Ability to change according to season  
(c.) Ability to change colour  
(d.) Ability to stay still for long periods of time

Which one of the following is the most effective in Ascaris infection?  
(a.) Chloroquinine  
(b.) Cinchona  
(c.) Colchicum  
(d.) Oil of Chenopodium

Mark the false statement for the phylum-Annelida  
(a.) They are bilaterally symmetrical coelomate animals  
(b.) They have both monoecious and dioecious animal representatives  
(c.) Excretory system consists of flame cells  
(d.) They do not have asexual reproduction

Which bird travels the longest distance each year?  
(a.) Flamingo  
(b.) Bubulcus  
(c.) Sterna macrura  
(d.) None of these

The skeleton of animals belonging to phylum-Porifera are made up of  
(a.) Spicules  
(b.) Spiracles  
(c.) Spines  
(d.) Spongocytes

If an earthworm is left in solution for a long time, which part would be left undissolved?  
(a.) Setae  
(b.) Spermathecae  
(c.) Sand particles  
(d.) Circular muscles

Asymmetrical animals are  
(a.) Amoeba  
(b.) Spongilla  
(c.) Spongia  
(d.) All of these

Choose the correctly matched characters of the phylum  
(a.) Ctenophore - Radial symmetry - Cellular level of organisation - Acoelomate  
(b.) Platyhelminthes - Bilateral symmetry Organ and organ system level of organisation Pseudocoelomate  
(c.) Echinodermata - Radial symmetry - Organ  
system level of organisation - Coelomate  
(d.) Coelenterata-Bilateral symmetry tissue level organisation - acoelomate

Which character is not same in Aves and mammals?  
(a.) Single systemic arch  
(b.) Metanephric kidney  
(c.) Seven cervical vertebrae  
(d.) Homeotherms

Collar cells are characteristic of  
(a.) Earthworm  
(b.) Roundworms  
(c.) Coelenterates  
(d.) Sponges

A sponge harmful to oyster industry is  
(a.) Cliona  
(b.) Euspongia  
(c.) Hyalonema  
(d.) Spongilla

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

Polyp phase is absent in  
(a.) Hydra  
(b.) Aurelia  
(c.) Physalia  
(d.) Obelia

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

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

The feeding organ in phylum-Mollusca is  
(a.) Ctenedia  
(b.) Undulating membrane  
(c.) Sucker  
(d.) Radula

Which set includes pathogenic arthropods?  
(a.) Tse-tse fly, mosquito, flea-plague  
(b.) Crab, Culex, spider  
(c.) Anopheles, Culex, cray fish  
(d.) Silver fish, house fly, sandfly

What is left when bath-sponges dries up?  
(a.) Spicules  
(b.) Spongin fibres  
(c.) Tentacles  
(d.) Holdfast

In the diagram of the reproductive system of earthworm A, B, C, D and E represents.

![](data:application/octet-stream;base64,)

(a.) A-Seminal vesicle, B-Spermathecae, CProstate gland, D-Ovary, E-Accessory gland  
(b.) A-Seminal vesicle, B- Ovary, CAccessory gland D- Spermathecae, E-Prostate gland,  
(c.) A-Spermathecae, B-Seminal vesicle, CAccessory gland D- Ovary, E- Prostate gland, (d.) A-Spermathecae, B- Seminal vesicle, COvary, D- Accessory gland E- Prostate gland,

During its life cycle, Fasciola hepatica (liver fluke) infects its intermediate host and primary host at the following larval stages, respectively  
(a.) Metacercaria and cercaria  
(b.) Miracidium and metacercaria  
(c.) Redia and miracidium  
(d.) Cercaria and redia

Which one has no intermediate host?  
(a.) Taenia  
(b.) Ascaris  
(c.) Fasciola  
(d.) Plasmodium

Air bladder occurs in  
(a.) Torpedo  
(b.) Anabas  
(c.) Scoliodon  
(d.) Elasmobranch

What is the scientific name of pinworm of man?  
(a.) Trichinella spiralis  
(b.) Dracunculus medinensis  
(c.) Trichuris trichuria  
(d.) Enterobius vermicularis

Aquatic reptiles are  
(a.) Ammonotelic  
(b.) Ureotelic  
(c.) Ureotelic in water  
(d.) Ureotelic over land

Earthworms are  
(a.) Ureotelic, when plenty of water is available  
(b.) Uricotelic, when plenty of water is available  
(c.) Uricotelic under conditions of water scarcity  
(d.) Ammonotelic when plenty of water is available

Rabbit is  
(a.) Carnivore  
(b.) Herbivore  
(c.) Both (a) and (b)  
(d.) Sanguivore

Ammocoetes is  
(a.) Organs that help excrete ammonia in invertebrates  
(b.) Animals that have an amniotic sac surrounding the embryo in development stages  
(c.) A larval stage  
(d.) None of the above

Chitin is a  
(a.) Lipid  
(b.) Protein  
(c.) Polysaccharide  
(d.) Sphingomyelin

In Mollusca, the osphradium has function of  
(a.) Reproduction  
(b.) Respiration  
(c.) Testing physical and chemical qualities of food  
(d.) Excretion

Higher phylum like echinoderms are  
(a.) Triploblastic animals  
(b.) Quadroblastic animals  
(c.) Diploblastic animals  
(d.) Uniblastic animals

Pecten, a comb-like structure is found in the eye of  
(a.) Fishes  
(b.) Frogs  
(c.) Birds  
(d.) Mammals

Which of the following is an exclusive character of class-Mammalia?  
(a.) Homoiothermy  
(b.) Internal fertilization  
(c.) Presence of a 4-chambered heart  
(d.) Presence of a muscular diaphragm

Which one of the following mammals is not an odd-toed ungulate?  
(a.) Rhinoceros  
(b.) Camel  
(c.) Zebra  
(d.) Horse

Reptiles are different from amphibians in  
(a.) The skin  
(b.) Structure of the heart  
(c.) Development stages  
(d.) All of these

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

Nidology is the study of  
(a.) Cnidarians  
(b.) Aschelminthes  
(c.) Bird nests  
(d.) Mammals

How many eggs are found in egg chamber of female cockroach?  
(a.) 2  
(b.) 4  
(c.) 8  
(d.) 16

The glands present in the skin of frog are  
(a.) Mucous and poisonous  
(b.) Sweat and mammary  
(c.) Sweat and sebaceous  
(d.) Mucous and sweat

Roundworms are different from Platyhelminthes in the following features  
(a.) Roundworms are triploblastic  
(b.) Roundworms have a complete digestive system  
(c.) Roundworms have flame cells  
(d.) All of the above

In earthworm, gizzard is found, in which of the following segments?  
(a.) segment  
(b.) segment  
(c.) segment  
(d.) segment

Ornithorhynchus is an example of  
(a.) Dinosaur  
(b.) Monotreme mammal  
(c.) Marsupial mammal  
(d.) Eutherian mammal

In cockroach, which of the following is the principal motor centre?  
(a.) Supraoesophageal ganglia  
(b.) Suboesophageal ganglia  
(c.) Metathoracic ganglia  
(d.) Abdominal ganglia

All flatworms differ from all roundworms in having  
(a.) Triploblastic body  
(b.) Solid mesoderm  
(c.) Bilateral symmetry  
(d.) Metamorphosis in the life history

The jawless vertebrate is  
(a.) Crocodile  
(b.) Loris  
(c.) Hyla  
(d.) Petromyzon

In Pheretima, the number of ring vessels per segment in and segments is  
(a.) 10 pairs  
(b.) 11 pairs  
(c.) 12 pairs  
(d.) 24 pairs

Choanocytes form the lining of paragastral cavity in  
(a.) Jelly fish  
(b.) Sponges  
(c.) Helminthes  
(d.) Echinoderms

Which of the following statements is true?  
(a.) All chordates are vertebrates  
(b.) All vertebrates are chordates  
(c.) Invertebrates possess a tubular nerve cord  
(d.) Non-chordates have a vertebral column

What will you look for to identity the sex of the following?  
(a.) Male frog - a copulatory pad on the first digit of the hind limb  
(b.) Female cockroach - anul ceri  
(c.) Male shark - claspers borne on pelvic fins  
(d.) Female Ascaris - sharply curved posterior end

Which of the following is not a defence evolved by a prey to avoid predators?  
(a.) Ejection of noxious chemicals  
(b.) Possession of toxic hairs  
(c.) Mimicry of inedible objects  
(d.) Secretion of pheromones

Bidder's canal is found in  
(a.) Testis of frog  
(b.) Kidney of frog  
(c.) Kidney of mammal  
(d.) Ovary of mammal

Which of the following are absent in snakes?  
(a.) Pectoral girdle  
(b.) Urinary bladder  
(c.) Sternum  
(d.) All of these

Bilateral symmetry, metameric segmentation, coelom and open circulatory system are the features of  
(a.) Annelida  
(b.) Arthropoda  
(c.) Mollusca  
(d.) Echinodermata

Highest degree of polymorphism is found in  
(a.) Protozoa  
(b.) Cnidaria  
(c.) Platyhelminthes  
(d.) Arthropoda

In Pheretima, septa are absent between which segments?  
(a.) and   
(b.) and   
(c.) and   
(d.) and 6/7

Which is the first class among the tetrapods to shows completely 4-chambered heart?  
(a.) Amphibia  
(b.) Reptilian  
(c.) Aves  
(d.) Mammalia

Lateral line sense organs occur in  
(a.) Salamander  
(b.) Frog  
(c.) Water snake  
(d.) Scoliodon

Mollusc, which does not have ink gland is  
(a.) Pila  
(b.) Loligo  
(c.) Sepia  
(d.) Octopus

Necturus is commonly known as  
(a.) The flying frog  
(b.) The mud puppy  
(c.) The crested newt  
(d.) The toad

Characteristic symptom of ancylostomiasis is  
(a.) Gastro-intestinal disturbance  
(b.) Anaemia  
(c.) Nervous disorders  
(d.) All of the above

Hormone responsible for metamorphosis in tadpole is  
(a.) Adrenaline  
(b.) Thyroxine  
(c.) Aldosterone  
(d.) Vasopressin

Urochordate animals have  
(a.) Notochord that extends from head to tail region  
(b.) Notochord is present throughout larval stages and adult life  
(c.) Notochord present only in adult stages  
(d.) Notochord present only in larval stage

A dorsal horn is present on the. of mulberry silk worm (caterpillar).  
(a.) abdominal segment  
(b.) abdominal segment  
(c.) abdominal segment  
(d.) thoracic segment

The nematocysts inject in its prey  
(a.) Coelenteron  
(b.) Neurotoxin  
(c.) Hypnotoxin  
(d.) Hypotoxin

Spiracles found in cockroach are  
(a.) 2 pairs in thorax and 100 pairs in abdomen  
(b.) 2 pairs in thorax and 6 pairs in abdomen  
(c.) 2 pairs in thorax and 8 pairs in abdomen  
(d.) 2 pairs in thorax and 4 pairs in abdomen

Which of the following figure shows coelomate condition? Refer to NCERT for figures

![](data:application/octet-stream;base64,)

(a.) A  
(b.) B  
(c.) C  
(d.) None of these

Metagenesis in seen in  
(a.) Hydra  
(b.) Aurelia  
(c.) Obelia  
(d.) Adamsia

Which of the following does not belong to the class-Hexactinellida?  
(a.) Hyalonema  
(b.) Cliona  
(c.) Euplectella  
(d.) None of these

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)

Which one of the following groups of animals is bilaterally symmetrical and triploblastic?  
(a.) Coelenterates (Cnidarians)  
(b.) Aschelminthes (roundworms)  
(c.) Ctenophores  
(d.) Sponges

The pair of amphibians found in Indian peninsula is  
(a.) Amphiuma  
(b.) Tyloto triton and Ichthyophis  
(c.) Hyla and Ambystoma  
(d.) Psittacus and Apteryx

Book lungs are respiratory organs in  
(a.) Insects  
(b.) Arachnids  
(c.) Molluscans  
(d.) Echinoderms

Which one is the real product of honey bee?  
(a.) Bee wax  
(b.) Honey  
(c.) Propolis  
(d.) Pollen

Nucleated RBC is present in  
(a.) Man  
(b.) Rat  
(c.) Frog  
(d.) Rabbit

The canal system is characteristic feature of  
(a.) Helminthes  
(b.) Coelenterates  
(c.) Sponges  
(d.) Echinoderms

Which of the following nephridia does not found in earthworm?  
(a.) Septal nephridia  
(b.) Macronephridia  
(c.) Integumentary nephridia  
(d.) Pharyngeal nephridia

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

Organ of mastication in cockroach is  
(a.) Labrum  
(b.) Labium  
(c.) Mandibles  
(d.) Maxilla

Which of the following are not members of sub class-Anura?  
(a.) Hyla, Xenopus and Pipa  
(b.) Rhacophorus and Bufo  
(c.) Ambystoma and lchthyophis  
(d.) Rana tigerina and Alytes

Vivipary is found in  
(a.) Coelenterata  
(b.) Protozoa  
(c.) Rabbit  
(d.) Pisces

The organs that assists in sound production in mosquito, is  
(a.) Hairy appendages  
(b.) Mouth parts  
(c.) Hemielytra  
(d.) Halteres

Mouth part of housefly are  
(a.) Siphoning type  
(b.) Sponging type  
(c.) Biting and chewing type  
(d.) Piercing and sucking type

The most powerful poison produced by vertebrates is  
(a.) Paratotoxin  
(b.) Hypotoxin  
(c.) Haemotoxin  
(d.) Batrachotoxin

Choose the false option  
(a.) Amoeba-Asymmetrical  
(b.) Coelenterates-Diploblastic, radial symmetry, non-chordates  
(c.) Chordates-Petromyzon, Ornithorhynchus, Equis  
(d.) Annelid-Pseudocoelomate

The main nitrogenous waste of Hydra, is  
(a.) Ammonia only  
(b.) Urea only  
(c.) Uric acid only  
(d.) Both (a) and (c)

Which of the following is not a characteristic of snakes?  
(a.) Eggs  
(b.) Sternum  
(c.) Scales  
(d.) Kidney

In insects which feed on nectar, the proboscis is formed by  
(a.) Hypopharynx  
(b.) Mandibles  
(c.) Glossa  
(d.) Labrium

Sponges are  
(a.) Pelagic  
(b.) Free-swimming  
(c.) Planktonic  
(d.) Sessile

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

Phallomerase in male Periplaneta arise from  
(a.) and sternum  
(b.) sternum  
(c.) sternum  
(d.) sternum

In forg's heart, there are muscular ridges which consist of fibers called  
(a.) Purkinje fibres  
(b.) Myonemes  
(c.) Telodendria  
(d.) Columnae carnae

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

Part of the right lung of rat which is not distinguishable due to passage of post caval through it is  
(a.) Anterior  
(b.) Middle  
(c.) Posterior  
(d.) Post caval

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

Chloragogen cells of earthworms are analogous to vertebrate  
(a.) Lungs  
(b.) Liver  
(c.) Gut  
(d.) Kidneys

The cavity in the region of diencephalon in the brain of rabbit is called  
(a.) Lateral ventricle  
(b.) Third ventricle  
(c.) Foramen of monro  
(d.) Iter

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

Mammals evolved from therapsid reptiles in Triassic period. The type of skull in these reptiles is  
(a.) Anapsid skull  
(b.) Parapsid skull  
(c.) Synapsid skull  
(d.) Diapsid skull

Bioluminescence is seen in phylum  
(a.) Ctenoplana  
(b.) Coelenterata  
(c.) Ctenophora  
(d.) Cnidaria

Characteristic feature of phylum-Echinodermata is  
(a.) Radial symmetry  
(b.) Water vascular system  
(c.) Mantle cavity  
(d.) All of these

Sea anemone belongs to phylum  
(a.) Protozoa  
(b.) Porifera  
(c.) Coelenterata  
(d.) Echinodermata

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

Insects have  
(a.) 2 pairs of legs  
(b.) 3 pairs of legs  
(c.) 4 pairs of legs  
(d.) 1 pair of legs

The character that differentiates chordate from non-chordate is  
(a.) Triploblastic body organization  
(b.) Heterotrophic mode of nutrition  
(c.) Dorsal tubular nerve cord  
(d.) Sexual reproduction

The post anal tail is present in  
(a.) Chordates  
(b.) Vertebrates  
(c.) Invertebrates  
(d.) All of these

Which type of cells absent in sponges?  
(a.) Trophocytes  
(b.) Myocytes  
(c.) Archaeocytes  
(d.) Cnidocytes

Which one of the following is not a characteristic feature of the sub-phylum-Vertebrata?  
(a.) Dorsal tubular nerve cord  
(b.) Ventral muscular heart  
(c.) Presence of notochord in the adult  
(d.) Presence of kidneys

Which of the following does not make a nest of its own?  
(a.) Crow  
(b.) Parrot  
(c.) Cuckoo  
(d.) Sparrow

Phylum of Taenia solium is  
(a.) Aschelminthes  
(b.) Annelida  
(c.) Platyhelminthes  
(d.) Mollusca

Identify the aquatic mammal(s) from the  
following  
I.Balenoptera  
II.Equus  
III.Delphinus  
IV.Pteropus  
V.Felis  
(a.) I and III  
(b.) II and IV  
(c.) V only  
(d.) IV and V

Which of the following cell types is capable of giving rise to other cell types in sponges?  
(a.) Thesocytes  
(b.) Pinacocytes  
(c.) Cnidocytes  
(d.) Archaeocytes

Which of the following is a flightless bird?  
(a.) Ostrich  
(b.) Emu  
(c.) Kiwi  
(d.) All of these

In the life cycle of mosquito, comma-shaped stage is  
(a.) Larval stage  
(b.) Pupal stage  
(c.) Imago stage  
(d.) None of these

Fertilized eggs of Periplanata Americana are encased in  
(a.) Ootheca  
(b.) Cocoon  
(c.) Genital chamber  
(d.) Phallomere

Medusa is the reproductive structure of  
(a.) Hydra  
(b.) Obelia  
(c.) Sea anemone  
(d.) None of these

The cells that help in excretion in Fasciola are called  
(a.) Choanocytes  
(b.) Nematocytes  
(c.) Nephridia  
(d.) Flame cells

Choose the correct option with regards to Chondrichthyes  
(a.) Presence of swim bladders that help them to maintain bouyancy  
(b.) These are usually ammoniotelic animals  
(c.) Statement (b) is true, but (a) is false  
(d.) Both statements (a) and (b) are false

Ascaris is characterized by  
(a.) Absence of true coelom but presence of metamerism  
(b.) Presence of neither true coelom nor metamerism  
(c.) Presence of true coelom and metamerism  
(d.) Presence of true coelom and metamerism (metamerisation)

Which of the following do not belong to classMammalia?

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(a.) B and E  
(b.) A and C  
(c.) E and C  
(d.) D and E

Radial symmetry is seen in  
(a.) Echinodermata, Ctenophora and Cnidaria  
(b.) Mollusca, Porifera and Echinodemata  
(c.) Porifera, Annelida and Arthropoda  
(d.) None of the above

In earthworm, neurons are  
(a.) Motor  
(b.) Associated  
(c.) Sensory  
(d.) All of these

Choose the respiratory organ that are not present in phylum-Arthropoda  
(a.) Tracheal system  
(b.) Gills  
(c.) Water vascular system  
(d.) Book lungs

Some of the statements are given below  
I. Porifera to Echinodermata lack a notochord  
II. Platyhelminthes display tissue level organisation  
III. Mesoglea is present in coelenterates during development  
IV. Aschelminthes are coelomates  
Choose the correct options  
(a.) I, II, II and IV are True  
(b.) I and II are True  
(c.) I and III are True  
(d.) II and III are True

Which of the following is not correctly matched?  
(a.) Sycon - Canal system  
(b.) Starfish - Radial symmetry  
(c.) Ascaris - Flame cell  
(d.) Prawn - Haemocoel

Which of the following belongs to the class-  
Amphineura?  
(a.) Chiton  
(b.) Nautilus  
(c.) Dentalium  
(d.) Pinctada

Consider the following four statements (I-IV) about certain desert animals such as kangaroo rat. I. They have dark colour and high rate of reproduction and excrete solid urine.  
II. They do not drink water, breathe at a slow rate to conserve water and have their body covered with thick hairs.  
III. They feed on dry seeds and do not require drinking water.  
IV.They excrete very concenntated urine and do not use water to regulate body temperature.  
Which two of the above statements for such animals are true?  
(a.) III and IV  
(b.) II and III  
(c.) III and I  
(d.) I and II

Exoskeleton of which phylum consists of a chitinous cuticle?  
(a.) Annelida  
(b.) Porifera  
(c.) Arthropoda  
(d.) Echinodermata

Canal system in Porifera is not concerned with  
(a.) Respiration  
(b.) Nutrition  
(c.) Sexual reproduction  
(d.) None of the above

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

Which of the following is the generic name of an extinct ancient lizard bird?  
(a.) Archaeopteryx  
(b.) Bulbulcus  
(c.) Dodo  
(d.) None of the above

Which of the following statements are true?  
(a.) Phylum-Porifera-Presence of choanocytes and nematocysts  
(b.) Phylum-Coelentrata-Meandrina belongs to this phylum  
(c.) Phylum-Ctenophora-All exhibit bilateral symmetry  
(d.) Phylum-Platyhelminthes-Wuchereria belongs to this phylum

Limbless amphibians are called  
(a.) Paddle worms  
(b.) Glow worms  
(c.) Caecilian worms  
(d.) Pin worms

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

The dorsal plate of skeleton found on the abdomen of cockroach is called  
(a.) Pleuron  
(b.) Sternum  
(c.) Tergum  
(d.) Vertex

In rabbit, end of a long bone is connected with another by  
(a.) Tendon  
(b.) Ligaments  
(c.) Muscle  
(d.) Cartilage

Correct sequenct in embryonic development of frog is  
(a.) Zygote - Cleavage - Blastula - Gastrula  
(b.) Zygote - Cleavage - Gastrula - Blastula  
(c.) Cleavage - Zygote - Blastula - Gastrula  
(d.) Zygote - Blastula - Cleavage - Gastrula

In rabbit, the two fibro-elastic strands of the larynx extend between the  
(a.) Thyroid and arytenoids cartilages  
(b.) Thyroid and cricoids cartilages  
(c.) Santorini and thyroid cartilages  
(d.) Cricoid and tracheal cartilaginous rings

Asexual reproduction in sponges takes place by  
(a.) Binary fission  
(b.) Budding  
(c.) Fragmentation  
(d.) Encystment

The number of trigeminal nerve in frog is  
(a.)   
(b.)   
(c.)   
(d.)

Which one of the following correctly describes the location of some body parts in the earthworm Pheretima?  
(a.) Two pairs of accessory glands in 16-18 segments  
(b.) Four pairs of spermathecae in 4-7 segments  
(c.) One pair of ovaries attached at intersegmental septum of and segments  
(d.) Two pairs of testes in and segments

Coelom is important because  
(a.) It allows the internal organs to grow  
(b.) It separates the gut from the body will muscles  
(c.) It has evolutionary significance  
(d.) All of the above

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

What distinguishes an insect from a crustacean?  
(a.) Number of appendages  
(b.) Number of eyes  
(c.) Presence of wings  
(d.) Arrangement of nerve cord

The radial symmetry is observed in  
I.Platyhelminthes  
II. Coelenterates  
III.Aschelminthes  
IV.Annelids  
V.Echinoderms  
(a.) II, III and V  
(b.) I, II, III and V  
(c.) II, III and I  
(d.) II and V

Which of the following are also known as collar cells?  
(a.) Choanocytes  
(b.) Pinocytes  
(c.) Thesocytes  
(d.) Cnidoblast

Different colours of frog skin are controlled by  
(a.) Hormones  
(b.) Melanocytes  
(c.) Nervous system  
(d.) Both (a) and (c)

Ascaris is  
(a.) A parasite  
(b.) An autotroph  
(c.) Facultative autotroph  
(d.) Facultative heterotrophy

Sea mouse belongs to phylum  
(a.) Mollusca  
(b.) Cnidaria  
(c.) Arthropoda  
(d.) Annelida

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

Chitin as exoskeleton is found in  
(a.) Periplaneta  
(b.) Ascaris  
(c.) Pheretima  
(d.) Hydra

Connecting link between chordates and non chordates is  
(a.) Peripatus  
(b.) Balanoglossus  
(c.) Sphenodon  
(d.) Tachyglossus

Choose the group of parasitic animal  
(a.) Wuchereria - Pheretima-Nereis  
(b.) Liverfluke - Dugesia - Ascaris  
(c.) Fasciola - Taenia - Ancylostoma  
(d.) Wuchereria - Fasciola - Dugesia

All mammals without any exception are characterized by  
(a.) Viviparity and biconcave red blood cell  
(b.) Extra abdominal testis and four-chambered heart  
(c.) Heterodont teeth and 12 pairs of cranial nerves  
(d.) A muscular diaphragm and milk producing glands

Types of salivary glands present in rabbit are  
(a.) One  
(b.) Two  
(c.) Three  
(d.) Four

Book lungs and look gills are found in which of the following animals, respectively?  
(a.) Prawns and lobsters  
(b.) Cockroaches and cuttle fish  
(c.) Pila and crabs  
(d.) Scorpion and king crabs

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

Choose the non-poisonous snake from the given options  
(a.) Krait and cobra snake  
(b.) Sea snake and coral snake  
(c.) Viper and rattle snake  
(d.) None of the above

Periplaneta Americana has themoreceptor sensillae on  
(a.) and segments of tarsus of legs  
(b.) and segments of tarsus of legs  
(c.) Pedicel of antenna  
(d.) segment of anal cerci

Mollusca is  
(a.) Triploblastic, Acoelomate  
(b.) Triploblastic, coelomate  
(c.) Diploblastic, Acoelomate  
(d.) Diploblastic, coelomate

Canal system is present in phylum  
(a.) Annelida  
(b.) Porifera  
(c.) Acanthocephala  
(d.) Echinodermata

Which one of the following does not have an excretory system?  
(a.) Myxine  
(b.) Carcharodon  
(c.) Balanoglossus  
(d.) Asterias

All mammals without any exception are characterized by  
(a.) Viviparity and biconcave red blood cells  
(b.) Extra-abdominal testes and a four chambered heart  
(c.) Heterodont teeth and 12 pairs of cranial nerves  
(d.) A muscular diaphragm and milk producing glands

Fossil representatives of phylum-Arthropods are called  
(a.) Triplolites  
(b.) Tagmalites  
(c.) Trilobites  
(d.) Archaeopods

Select the false statement.  
(a.) In rats, the teeth are heterodont and thecodont  
(b.) In female rats, the urinary and genital apertures are located above anus  
(c.) In female rats, six pairs of nipples are present on the ventral surface of the trunk  
(d.) In rats, 12 pairs of cranial nerves and 33 pairs of spinal nerves are present

Choanocyte is the characteristic feature of  
(a.) Sponges  
(b.) Arthropods  
(c.) Annelids  
(d.) None of these

Preen glands occur on  
(a.) Reptilia  
(b.) Aves  
(c.) Pisces  
(d.) Mammalia

Which one is not correct?  
(a.) Humans-Ureotelic  
(b.) Birds-Uricotelic  
(c.) Lizards-Uricotelic  
(d.) Whale-Ammonotelic

Which of the following is a flightless bird?  
(a.) Columba and corvus splendes  
(b.) Struthio and penguin  
(c.) Tyto and psittacula  
(d.) All of the above

Class-crustacea differs from Insecta in having  
(a.) Two pairs of antennae  
(b.) Jointed foot  
(c.) Chitinous cuticle  
(d.) None of these

Male and female cockroach are differ due to presence or absence of  
(a.) Anal cerci  
(b.) Anal style  
(c.) Both 'a' and 'b'  
(d.) Anal sitae

Which of the following has exoskeleton of scales and paired copulatory organ penis?  
(a.) Sharks  
(b.) Lizards  
(c.) Urodela  
(d.) Urochordata

The adhesive pads (soft-pads) present in the legs of cockroach are  
(a.) Galea  
(b.) Lacinia  
(c.) Glossa  
(d.) Plantulae

Which sound producing organ is found in bird?  
(a.) Pharynx  
(b.) Larynx  
(c.) Syrinx  
(d.) Trachea

Choose the correct option for Wuchereria?  
I. Triploblastic with the presence of an excretory pore  
II. Presence of a muscular pharynx  
III. Males longer than females  
IV. Cellular level of organisation  
(a.) II and III are True  
(b.) I and IV are True  
(c.) I and II are True  
(d.) III and IV are True

Amphids are cuticular elevations on ventrolateral lips of Ascaris. These are  
(a.) Tangoreceptors  
(b.) Tactoreceptors  
(c.) Olfactoreceptors  
(d.) Chemoreceptors

The first phylum to have a complete alimentary canal is  
(a.) Platyhelminthes  
(b.) Ascaris  
(c.) Aschelminthes  
(d.) Annelida

Salivary gland in earthworm is found in  
(a.) Dorsal wall of buccal cavity  
(b.) Ventral wall of buccal cavity  
(c.) Pharyngeal wall  
(d.) None of the above

Haemocoel is found in  
(a.) Hydra and Aurelia  
(b.) Taenia and Ascaris  
(c.) Cockroach and Pila  
(d.) Balanoglossus and Herdmania

Which one of the following is not a mammalian character?  
(a.) Presence of milk producing gland  
(b.) They have two pairs of limbs  
(c.) Skin is unique in possessing hair  
(d.) Homodont type of dentition

Correct order of ear ossicles in rabbit is  
(a.) Incus, stapes, malleus  
(b.) Malleus, incus, stapes  
(c.) Malleus, stapes, incus  
(d.) Incus, malleus, stapes

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

Which statement is incorrect about Pleurobrachia?  
(a.) They are diploblastic  
(b.) They have tissue level organisation  
(c.) They have comb plates  
(d.) They are triploblastic

The functional kidney of frog tadpole is  
(a.) Archinephros  
(b.) Pronephros  
(c.) Mesonephros  
(d.) Metanephros

In rabbit, placenta is formed by  
(a.) Chorio allantoic membrane and yolk sac  
(b.) Amnion, chorion and yolk sac  
(c.) Chorio allantoic membrane and endometrium  
(d.) Allantois and endometrium

Which class shows the presence of amnion and chorionic membranes during development?  
(a.) Amphibian  
(b.) Osteichthyes  
(c.) Reptilia  
(d.) Chondrichthyes

Age of fishes is also known as  
(a.) Permian era  
(b.) Silurian era  
(c.) Devonian era  
(d.) Ordovician era

Which one of the following phyla is correctly matched with its two general characteristics?  
(a.) Arhropoda - 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

The larva of Bombyx mori is known as  
(a.) Nymph  
(b.) Trochophore  
(c.) Cocoon  
(d.) Caterpillar

Which is a condition that in connected in the both external and internal structures and it is first found in which phylum of the animal kingdom  
(a.) Mutagenesis-Platyhelminthes  
(b.) Metagenesis-Coelenterata  
(c.) Appendages-Arthropoda  
(d.) Metamerism-Annelida

Diploblastic animals belong to the phylum  
(a.) Protista  
(b.) Protozoa  
(c.) Coelenterates  
(d.) Platyhelminthes

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

Which of the following hormones regulates growth and metamorphosis in insect?  
(a.) Juvenile hormone  
(b.) Brain hormone  
(c.) Ecdysone  
(d.) Prothoracicotropic hormone

Which of the following is not a larval form of Mollusca?  
(a.) Pluteus  
(b.) Trochophore  
(c.) Veliger  
(d.) Glochidium

In the given diagram different parts are indicated by alphabets. Choose the answer, in which these alphabets correctly match with the parts they indicate.

![](data:application/octet-stream;base64,)

(a.) A-Rostellum  
B- Hooks  
C-Sucker  
D- Proglottids  
(b.) A-Suctorial mouth  
B-Hooks  
C-Sucker  
D- Segments  
(c.) A-Mouth  
B-Tentacles  
C- Sucker  
D- Segments  
(d.) A-Sucker  
B- Hairs  
C-Ring

Which one of the following animals is correctly matched with its particular named taxonomic category?  
(a.) Cuttlefish - Mollusca, a class  
(b.) Humans - Primata, the family  
(c.) Housefly - Musca, an order  
(d.) Tiger - tigris, the species

Note the following words.  
I.Fenestra  
II. Pedical  
III.Lacinia  
IV. Flagellum  
V.Galea  
VI. Mentum  
VII.Palpifer  
VIII. Cardo  
IX.Glossa  
Which of the above found in the first pair of maxillae in case of cockroach?  
(a.) III, V, VII and VIII  
(b.) I, III, V and IX  
(c.) I, VI, VII and IX  
(d.) II, V, VII and IX

Nematoblasts of Hydra are  
(a.) Sensory  
(b.) Complicated  
(c.) With nematocyst apparatus  
(d.) All of the above

Which of the following is a viviparous fish?  
(a.) Exocoetus  
(b.) Gambusia  
(c.) Clarias  
(d.) Labeo

The integument of the frog is always kept moist because  
(a.) It cannot move with dry skin  
(b.) It performs cutaneous respiration  
(c.) It cannot catch food with dry skin  
(d.) It cannot jump better with moist skin

Which of the following animal phyla does not possess a coelom?  
(a.) Platyhelminthes  
(b.) Annelida  
(c.) Mollusca  
(d.) Echinodermata

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

Which of the these statements are wrong?  
I.Parapodia are lateral appendages in arthropods used for swimming.  
II.Radula in molluscs are structures involved in excretion.  
III.Aschelminthes are dioecious.  
IV.Echinoderm adults show radial symmetry. V.Ctenophorans are diploblastic.  
(a.) I and II  
(b.) I and III  
(c.) I, IV and V  
(d.) III and V

Three types of body cavity are  
(a.) True coelom, pseudocoelom and haemocoel  
(b.) Pseudocoelom, protocoelom and acoelom  
(c.) Acoelom, deuterocoel and homocoel  
(d.) Protocoel, deuterocoel and pseudocoelom

Radial symmetry is found in  
(a.) Frog  
(b.) Starfish  
(c.) Humans  
(d.) Pheretima

Which one is harmful insect among the following?  
(a.) Apis  
(b.) Pyrilla  
(c.) Tachardia  
(d.) Antheraea

Integumentary nephridia are also called  
(a.) Enteronephric  
(b.) Exonephric  
(c.) Sometimes enteronephric and sometimes exonephric  
(d.) Both (a) and (b)

The young one of cockroach is called  
(a.) Caterpillar  
(b.) Nymph  
(c.) Fingerling  
(d.) Maggot

In which segment, the clitellum is present in earthworm?  
(a.) 16 segments  
(b.) 17-19 segments  
(c.) 14-16 segments  
(d.) 5-6 segments

Which one of the following animals is correctly matched with its one characteristic and the taxon?  
Animal  
Characteristic  
Taxon  
(a.) Millipede Ventral nerve cord  
Arachnida Mammalia  
(b.) Duck-billed platypus Oviparous  
Mammalian  
(c.) Silver fish  
Pectoral and pelvic  
fins Chordata  
(d.) Sea anemone Triploblastic  
Cnidaria

Animals active at night are  
(a.) Diurnal  
(b.) Nocturnal  
(c.) Parasites  
(d.) Nocto-diurnal

Tube-feet are the locomotory organs of  
(a.) Platyhelminthes  
(b.) Echinodermata  
(c.) Mollusca  
(d.) Arthropoda

The excretory material of bony fish is  
(a.) Urea  
(b.) Protein  
(c.) Ammonia  
(d.) Amino acid

A detritivorous animal of economic importance is  
(a.) Earthworm  
(b.) Giriraja fow  
(c.) Caterpillar larva  
(d.) Leech

Pseudocoelom is not found in  
(a.) Ascaris  
(b.) Ancylostoma  
(c.) Fasciola  
(d.) None of these

In Pheretima, the red coloured round bodies in , and segment above the alimentary canal are believed to be involved in  
(a.) Reproduction  
(b.) Digestion  
(c.) Excretion  
(d.) Leucocyte production

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

Tadpole's tail is a/an  
(a.) Excretory organ  
(b.) Attachment organ  
(c.) Respiratory organ  
(d.) Locomotory organ

Frog's tadpole is  
(a.) Uricotelic  
(b.) Ureotelic  
(c.) Ammonotelic  
(d.) Aminotelic

3-segmented club shaped maxillary palp is present in  
(a.) Male Culex  
(b.) Male Anopheles  
(c.) Female Culex  
(d.) Female Anopheles

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

In tissue level of organisation the  
(a.) Cells are arranged as loose cell aggregate  
(b.) Tissues are grouped to form organs  
(c.) Cells performing the same function are arranged into groups  
(d.) Tissues are grouped to form systems

Select the correct set of animals of class-  
Mammalia.  
(a.) Lion, hippopotamus, penguin, bat  
(b.) Lion, bat, whale ostrich  
(c.) Hippopotamus, penguin, whale, kangaroo  
(d.) Whale, bat, kangaroo, hippopotamus

Which one of the following is a flightless bird?  
(a.) Passer  
(b.) Corvus  
(c.) Aptenodytes  
(d.) Pavo cristatus

A list of animals is given below. Identify the animals with open circulatory system and choose the correct answer  
I.Ascidia  
II.Cockroach  
III.Earthworm  
IV.Prawn  
V.Silverfish  
VI.Snail  
VII.Squid  
(a.) II, IV and VI  
(b.) I, II, IV and VI  
(c.) III, IV, V and VII  
(d.) II, IV, V and VI

Which of the parts in cockroach are  
fundamentally similar in structure?  
(a.) Anal styles and labrum  
(b.) Maxillae and legs  
(c.) Mandibles and antennae  
(d.) Wings and anal cerci

The golden age of reptiles was  
(a.) Proterozoic era  
(b.) Palaeozoic era  
(c.) Mesozoic era  
(d.) Coenozoic era

In a copulating pair of earthworm, which two processes take place?  
(a.) External fertilization and cross fertilization  
(b.) Cross fertilization and reciprocal fertilization  
(c.) Internal fertilization and cross fertilization  
(d.) Reciprocal fertilization and internal fertilization

Study the following features of a fish.  
I. It is a crossopterygian fish.  
II. It is found in the river Chalumnae.  
III. It does not exhibit aestivation.  
IV. It is an urecotelic animal.  
V. Which of the above are true to 'Neoceratodus'  
(a.) I and II  
(b.) II and IV  
(c.) I and III  
(d.) I and IV

Body cavity lined by mesoderm is called  
(a.) Coelenteron  
(b.) Pseudocoel  
(c.) Coelom  
(d.) Blastocoels

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

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(a.) Sternum, Anal cercus, tergum, Anal styles  
(b.) tergum, Anal cercus,   
Anal styles, D - Sternum  
(c.) A - Anal styles, Anal cercus,   
Tergum Sternum  
(d.) Sternum, Anal cercus, Tergum, Sternum

Siphonophora is the order in  
(a.) Protozoa  
(b.) Cnidaria  
(c.) Porifera  
(d.) Annelida

Which of the following is present in the integument of frog but not in mammals?  
(a.) Dermis  
(b.) Mucous gland  
(c.) Sweat glands  
(d.) Stratum germinativum

Trichocyst and nematocysts are meant for  
(a.) Defence  
(b.) Nutrition  
(c.) Respiration  
(d.) Excretion

Starfish belongs to phylum  
(a.) Porifera  
(b.) Coelenterata  
(c.) Echinodermata  
(d.) Arthropoda

The centrum of VIII vertebra of frog is  
(a.) Procoelous  
(b.) Heterocoelous  
(c.) Amphicoelous  
(d.) Opisthocoelous

The echinoderms are  
(a.) Arborial insects  
(b.) Marine animals  
(c.) Terrestrial insects  
(d.) Freshwater worms

Body of earthworm is divided into how many similar segments, which are called metameres or somites?  
(a.) 60 to 120  
(b.) 100 to 120  
(c.) 80 to 120  
(d.) 120 or more

Right aortic arch is present in  
(a.) Reptiles only  
(b.) Mammals only  
(c.) Birds only  
(d.) Both (b) and (c)

Mammal's heart is  
(a.) Myogenic  
(b.) Neurogenic  
(c.) Voluntary  
(d.) Sympathetic

Which one of the following is not a characteristic feature of sponges?  
(a.) Cellular level of organization  
(b.) Presence of ostia  
(c.) Intracellular digestion  
(d.) Body supported by chitin

Which of the following are true to the prototherians?  
I.Pectoral girdle is associated with T-shaped interclavicle.  
II.Mammary glands are modified as sebaceous glands.  
III.Pelvic girdle possesses epipubic bones.  
IV.Vertebrae are with epiphyses.  
(a.) I and III  
(b.) I and II  
(c.) III and IV  
(d.) II and III

Which one of the following animals belongs to  
cyclostomata?  
(a.) Channa  
(b.) Loris  
(c.) Dodo  
(d.) Petromyzon

In which of the following organisms testes descend into scrotum in breeding season but in non-breeding season goes up?  
(a.) Frog  
(b.) Kangaroo  
(c.) Shrew  
(d.) Bat

Food of Hydra is  
(a.) Aquatic plants  
(b.) Aquatic animals  
(c.) Algae and aquatic animals  
(d.) Some crustaceans

The excretory cells, that are found in Platyhelminthes are  
(a.) Protonephridia  
(b.) Flame cells  
(c.) Solenocytes  
(d.) All of these

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

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

Some vertebrae in birds fuse to form  
(a.) Sacrum  
(b.) Synsacrum  
(c.) Coccyx  
(d.) None of these

Petromyzon and myxine belong to class  
(a.) Gnathostomata  
(b.) Cyclostomata  
(c.) Urochordata  
(d.) Protochordata

The character of birds without exception is  
(a.) Omnivorous  
(b.) Flying wings  
(c.) Beak without teeth  
(d.) Lay eggs with calcareous shell

The substance or structure found in the eyes of birds is  
(a.) Keratin  
(b.) Nectin  
(c.) Pleura  
(d.) Pectin

The mantle in the phylum-Mollusca is a  
(a.) Calcareous shell  
(b.) Chitinous outer covering  
(c.) Soft spongy layer of skin  
(d.) None of these

In Ascaris, the coelom is  
(a.) Schizocoelom  
(b.) Pseudocoelom  
(c.) True coelom  
(d.) Haemocoelom

Which one of the following kinds of animal are triploblastic?  
(a.) Flatworms  
(b.) Sponges  
(c.) Ctenophores  
(d.) Corals

In Hydra, reproduction occurs in favourable conditions by  
(a.) Budding  
(b.) Gametes  
(c.) Gemmules  
(d.) Binary fission

Which of the following animals can successfully reproduce without utilizing the process of mitosis?  
(a.) Amoeba  
(b.) Hydra  
(c.) Tapeworm  
(d.) Sycon

Which of the following insect is not of any economic benefit?  
(a.) Silkworm  
(b.) Lac insect  
(c.) Locust  
(d.) Honey bee

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

A coelom is a  
(a.) Cavity between body well and gut wall  
(b.) Body cavity lined by mesoderm  
(c.) Body cavity not lined by mesoderm  
(d.) Body cavity lined by endoderm

In rabbit, head of epididymis present at the head of the testis is called  
(a.) Vas deferens  
(b.) Cauda epididymis  
(c.) Gubernaculum  
(d.) Caput epididymis

Animals of class-Mammalia have  
(a.) Seven cervical vertebrae  
(b.) Seven cranial nerve  
(c.) Single ventricular chamber  
(d.) Fourteen cervical vertebrae

Which one of the following animal has both exoskeletal and endoskeletal structures?  
(a.) Freshwater mussel  
(b.) Tortoise  
(c.) Frog  
(d.) Jelly fish

The nerve net of Hydra lacks  
(a.) Neurons  
(b.) Connections  
(c.) Dendrites  
(d.) Directions in impulse

The movement or locomotion in Aschelminthes is due to  
(a.) Calcareous skeleton  
(b.) Siliceous skeleton  
(c.) Hydro skeleton  
(d.) Exoskeleton

When the body is externally and internally divided into segments, it is called  
(a.) True segmentation  
(b.) False segmentation  
(c.) Pseudo segmentation  
(d.) Asegmentation

Excretory organ of spider is  
(a.) Coxal glands  
(b.) Flame cells  
(c.) Malpighian tubule  
(d.) Nephridia

Choose the correct combination of labeling from the options given.

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(a.) A-Testis, B-Spermatheca, C-Seminal vesicle, D-Ovary, E-vas deferens, F-Accessory gland  
(b.) A-Spermatheca, B-Testis, C-Ovary, D- Seminal vesicle, E- vas deferens, F- Accessory gland  
(c.) A-Spermatheca, B-Testis, C- Seminal vesicle, D- Ovary, E- vas deferens, F- Accessory gland  
(d.) A-Spermatheca, B-Testis, C-Accessory gland, D- Ovary, E-vas deferens, F-Seminal vesicle,

What is true about Nereis, scorpion, cockroach and silver fish?  
(a.) They all have jointed paired appendages  
(b.) They all possess dorsal heart  
(c.) None of them is aquatic  
(d.) They all belong to the same phylum

In earthworm, the dorsal wall of the intestine from the segment to segment forms a median internal fold called  
(a.) Trochophore  
(b.) Typhlosole  
(c.) Clitellum  
(d.) Trachea

Which of the following phyla are schizocoela?  
(a.) Annelida, Platyhelminthes and Mollusca  
(b.) Annelida, Arthropoda and Mollusca  
(c.) Platyhelminthes, Aschelminthes and Annelida  
(d.) Aschelminthes, Annelida and Mollusca

Cilia of gills of bivalve molluscs help in  
(a.) Feeding  
(b.) Digestion  
(c.) Reproduction  
(d.) Excretion

In which of the following animals, respiration occurs without any respiratory organ?  
(a.) Frog  
(b.) Fish  
(c.) Cockroach  
(d.) Earthworm

Scales are found in  
(a.) Pisces  
(b.) Rabbit  
(c.) Human  
(d.) Rat

Eggs of cockroach are  
(a.) Alecithal  
(b.) Microlecithal  
(c.) Telolecithal  
(d.) Cintrolecithal

Cavity of coelenterates is called  
(a.) Coelenterons  
(b.) Coelom  
(c.) Cavity  
(d.) None of these

Biramous appendages are present in  
(a.) Insect  
(b.) Crustacea  
(c.) Onychophora  
(d.) Cephalopoda

Juvenile hormone is secreted by  
(a.) Thyroid gland  
(b.) Thymus gland  
(c.) Adrenal gland  
(d.) Corpora allata

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

Phylum-Ctenophora is divided into following classes  
(a.) Tentaculata and Micropharyngea  
(b.) Nuda and Macropharyngea  
(c.) Tentaculata and Nuda  
(d.) Nuda and Hormiphora

Which of the following pairs is correct?  
(a.) Annelida - Polychaeta - leech  
(b.) Arthropoda - Crustacea - cockroach  
(c.) Mollusca - Cephalopoda - Octopus  
(d.) Protozoa - Hydra

Which of the following is not an insect?  
(a.) Locust  
(b.) Lepisma  
(c.) Termites  
(d.) Spider

Scientific name of starfish is  
(a.) Echinus  
(b.) Limulus  
(c.) Echidna  
(d.) Asterias

In which of the following organisms, selffertilization is seen?  
(a.) Fish  
(b.) Roundworm  
(c.) Earthworm  
(d.) Liver fluke

Cysticercus stage is found in  
(a.) Taenia  
(b.) Plasmodium  
(c.) Leishmania  
(d.) Wuchereria

In housefly, pseudotracheae is found in  
(a.) Haustellum  
(b.) Rostrum  
(c.) Labellum  
(d.) None of these

Which brain structure in rabbit is directly related to vision?  
(a.) Corpus albicans  
(b.) Hippocampal lobe  
(c.) Corpus callosum  
(d.) Corpora quadrigemina

Secondary radial symmetry is found in  
(a.) Cnidaria  
(b.) Jelly fish  
(c.) Echinodermata  
(d.) Hemichordata

The correct sequence of arrangements of segments in the leg of cockroach is  
(a.) Tibia, trochanter, femur, tarsus and coxa  
(b.) Trochanter, coxa, tibia, femur and tarsus  
(c.) Coxa, femur, trochanter, tibia and tarsus  
(d.) Coxa, trochanter, femur, tibia and tarsus

Select the phylum that is neither bilaterally symmetrical nor radially symmetrical nor radially symmetrical  
(a.) Ctenophora  
(b.) Coelenterata  
(c.) Porifera  
(d.) Annelida

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

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

Hydra recognizes its prey by  
(a.) Nematocyst  
(b.) Some special organs  
(c.) Chemical stimulus of prey  
(d.) Mechanical stimulus of prey

From the following statements select the wrong one.  
(a.) Millipeds have two pairs of appendages in each segment of the body  
(b.) Prawn has two pairs of antennae  
(c.) Animals belonging to phylum-Porifera are exclusively marine  
(d.) Nematocysts are characteristic of the phylumCnidaria

The phylum-Annelida is named so because of (a.) More organs are placed towards anterior part of the body  
(b.) The presence of antenna  
(c.) Anteriorly placed neural system  
(d.) The presence of metameres

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

Which of the following respires through gills?  
(a.) Whale  
(b.) Turtle  
(c.) Frog  
(d.) Prawn

Columella auris is found in  
(a.) Rabbit  
(b.) Frog  
(c.) Man  
(d.) All of these

Choose the correct option with reference to Ascaris.  
(a.) Hatching of embryos takes place in the stomach due to lytic enzyme  
(b.) Adulthood is reached inside the body of the host in ten days time  
(c.) Development and moulting takes place in the alveoli of lungs  
(d.) Hatching of embryos takes place within ten hours

The secondary host of Taenia saginata is  
(a.) Cow  
(b.) Pig  
(c.) Dog  
(d.) None of these

Shell of molluscs is derived from  
(a.) Foot  
(b.) Mantle  
(c.) Ctenidia  
(d.) Placoid

The type of symmetry belongs to animals is  
(a.) Transverse symmetry  
(b.) Lateral symmetry  
(c.) Bilateral symmetry  
(d.) Oblique symmetry

Development of Mollusca is  
(a.) With a larvae named trocophore  
(b.) Always direct without larval stages  
(c.) With larvel stage called glochidium  
(d.) With larval stage called wriggler

Neopallium is found in the brain of  
(a.) Amphibian  
(b.) Advanced reptiles  
(c.) Mammals  
(d.) Both (b) and (c)

Which of the following is a monogenetic parasite?  
(a.) Taenia solium  
(b.) Ascaris  
(c.) Fasciola hepatica  
(d.) Plasmodium vivax

Salient feature of Arthropoda is  
(a.) Aquatic and free living  
(b.) Chitinous exoskeleton and jointed appendages  
(c.) Both (a) and (b)  
(d.) None of the above

Chloragogen cells are present in Pheretima. These are specialized for performing function of  
(a.) Nutrition  
(b.) Reproduction  
(c.) Excretion  
(d.) Respiration

Veliger larva occurs in phylum  
(a.) Mollusca  
(b.) Echinodermata  
(c.) Arthropoda  
(d.) Cnidaria

Among the following which one lay eggs and does not produce young ones directly?  
(a.) Echidna  
(b.) Kangaroo  
(c.) Polcapine  
(d.) Whale

Venom of viper affects  
(a.) Nervous system  
(b.) Circulatory system  
(c.) Respiratory system  
(d.) None of these

Which of the following statements are true (T) and which are false (F)? Choose the correct option I. Amphibians have metanephric kidneys  
II. The skull of mammals is dicondylic  
III. Aves copulate by cloacal apposition  
IV. Voice is produced in Aves by a syrinx  
V. Lepus is gregarious in nature  
(a.) II, IV and V are true, I and III are false  
(b.) II, III and IV are true, I and V are false  
(c.) II and V are true, I, II and V are false  
(d.) I, II and V are true, III and IV are false

In Pheretima, the anterior loops carry blood from  
(a.) Commissural blood vessels  
(b.) Ventral blood vessels  
(c.) Supraoesophageal  
(d.) Lateral oesophageal

Tube feet is the locomotory organ in  
(a.) Star fish  
(b.) Jelly fish  
(c.) Silver fish  
(d.) Scoliodon

'Turbellarians' are free living  
(a.) Nematodes  
(b.) Cestodes  
(c.) Flatworms  
(d.) Trematodes

Ecdysone is produced by  
(a.) Prothoracic gland  
(b.) Corpora cardiaca  
(c.) Corpora allata  
(d.) Abdominal gland

True segmentation is also called  
(a.) Metagenesis  
(b.) Metamorphosis  
(c.) Metamerism  
(d.) Metasegmerism

Which of the following animals has a true coelom?  
(a.) Ascaris  
(b.) Pheretima  
(c.) Sycon  
(d.) Taenia solium

The highly degraded organic matter rich in nitrogen and potassium in particular resulting from the activity of earthworms, is called  
(a.) Worm castings  
(b.) Vermicompost  
(c.) Compost bedding  
(d.) Humus

Egg of cockroach gives rise to  
(a.) Nymph  
(b.) Caterpillar  
(c.) Larva  
(d.) Pupa

Which one of the following is a matching pair of an animal and a certain phenomenon it exhibits?  
(a.) Chamaelon  
Mimicry  
(b.) Taenia  
Polymorphism  
(c.) Pheretima  
Sexual dimorphism  
(d.) Musca  
Complete  
metamorphosis

From Ascaris egg, first larva hatches out in the  
(a.) Intestine of host  
(b.) Stomach of host  
(c.) Outside the body  
(d.) Uterus of female Ascaris

Poison gland in snake is located in  
(a.) Parietal  
(b.) Maxilla  
(c.) Mandible  
(d.) Neck

'Portuguese man of war' is  
(a.) Obelia  
(b.) Physalia  
(c.) Aurelia  
(d.) Branchiostoma

In cockroach, larval and nymphal characters are maintained by  
(a.) Ecdysone  
(b.) Salivary glands  
(c.) Parotid gland  
(d.) Juvenile hormone

In frogs, oviduct is formed by  
(a.) Wolffian duct  
(b.) Metanephric duct  
(c.) Mullerian duct  
(d.) Bidder's canal

Mouth part of mosquito is  
(a.) Sucking and piercing type  
(b.) Sponging type  
(c.) Biting and chewing type  
(d.) None of the above

Waggle dance in honeybees tells about  
(a.) Direction of food source  
(b.) Distance of food source  
(c.) Both (a) and (b)  
(d.) None of these

Which one of the following is not used in organic farming?  
(a.) Glomus  
(b.) Earthworm  
(c.) Oscillatoria  
(d.) Snail

Number of segments found in abdomen of cockroach are  
(a.) 8  
(b.) 10  
(c.) 12  
(d.) 15

Choose the kind of erythrocyte found in Reptiles  
(a.) Circular - biconvex - nucleated  
(b.) Oval - biconcave - denucleated  
(c.) Circular - biconcave - denucleated  
(d.) Oval - biconvex - nucleated

Which is not correctly matched?  
(a.) Annelida  
Enterocoelomate  
(b.) Platyhelminthes  
Acoelomate  
(c.) Arthropoda  
Schizocoelomate  
(d.) Nemathelminthes -Pseudocoelomate

Radial symmetry is seen in  
(a.) Hydra  
(b.) Schistosoma  
(c.) Taenia  
(d.) Fasciola

Select the phylum that is the largest of the kingdom-Animalia  
(a.) Phylum-Mollusca  
(b.) Phylum-Arthropoda  
(c.) Phylum-Annelida  
(d.) Phylum-Coelenterata

Which animal of the following belongs to classCrustacea?  
(a.) Cockroach  
(b.) Cyclops  
(c.) Grasshopper  
(d.) Mosquito

Gill is monopectinate in  
(a.) Unio  
(b.) Chiton  
(c.) Octopus  
(d.) Pila

Non-chordates show  
(a.) Notochord  
(b.) Dorsal tubular nerve chord  
(c.) Pharyngeal gill cleft  
(d.) Absence of hepatic portal system

The cross-section of the body of an invertebrate is given below. Identify the animal, which has this body plan.

![](data:application/octet-stream;base64,)

(a.) Cockroach  
(b.) Roundworm  
(c.) Planaria  
(d.) Earthworm

In which of the following, there is syncytial epidermis and longitudinal muscle cells in four bands?  
(a.) Nematodes  
(b.) Platyhelminthes  
(c.) Annelids  
(d.) Echinoderms

The skeleton of corals is composed of  
(a.) Siliceous spicules  
(b.) Calcium sulphate  
(c.) Calcium carbonate  
(d.) Potassium sulphate

In Pheretima, the glands that help in binding the worms during copulation are  
(a.) Prostate glands  
(b.) Albumin glands  
(c.) Accessory glands  
(d.) Mucous glands

Aschelminthes are usually  
(a.) Dioecious  
(b.) Hermaphrodites  
(c.) Metagenic  
(d.) Coelomates

In the and 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

Metameric segmentation is the characteristic of  
(a.) Platyhelminthes and Arthropoda  
(b.) Echinodermata and Annelida  
(c.) Annelida and Arthropoda  
(d.) Mollusca and Chordata

Which of the following statements are true/false? [I.In](http://I.In) torpedo, the electric organs are capable of generating strong electric shock to paralyze the prey  
II.Bony fishes use pectoral, pelvic, dorsal, anal and caudal fins in swimming  
III.Amphibian skin is moist and has thick scales  
IV.Birds are poikilothermous animals  
V.The most unique mammalian characteristic is the presence of milk producing mammary glands by which the young ones are nourished  
(a.) I, II and III are true; IV, V are false  
(b.) I, II and V and true; III and IV are false  
(c.) I, II and III are false; IV and V are true  
(d.) I, II and IV are false; III, and V are true

Cellulose digesting zooflagellate found in wood cockroaches is  
(a.) Lophomonas  
(b.) Trichomonas  
(c.) Trichonympha  
(d.) Leishmania

Dental formula of rabbit is  
(a.)   
(b.)   
(c.)   
(d.)

Nematoblasts are formed by  
(a.) Interstitial cells  
(b.) Glands cells  
(c.) Mesoepithelial cells  
(d.) Nerve cells

Select the correct statement.  
(a.) Birds are poikilothermic.  
(b.) Flatworms are coelomic animals.  
(c.) Earthworm is metamerically segmented.  
(d.) Fishes are radially symmetrical.

Which of the following statements are true/false?  
I. Poikilothermic animals are also called ectothermic animals  
II. Sharks are ovoviviparous animals  
III. Coxal glands are excretory organs present in arachnids  
IV. Copper containing respiratory pigment is called haemocyanin, it is present in Pila  
(a.) All the statements are false  
(b.) All the statements are true  
(c.) I and II are true and III and IV are false  
(d.) I and III are true and II and IV are false

Which of the following sets of derivatives of integumentary structures characterize birds, as glorified reptiles?  
(a.) Scales and claws  
(b.) Syrinx and uropygial gland  
(c.) Claws and uropygial gland  
(d.) Syrinx and scales

Which of the following is a catadromous fish?  
(a.) Hilsa sp  
(b.) Mystus sp  
(c.) Anguilla sp  
(d.) Channa sp

Ichthyophis belongs to class  
(a.) Mammalia  
(b.) Reptilia  
(c.) Amphibia  
(d.) Aves

The response to external stimulus is quicker and more precise in which of the following symmetry?  
(a.) Radial  
(b.) Bilateral  
(c.) Spherical  
(d.) Biradial

In the given diagram, what does ' A ' represent?

![](data:application/octet-stream;base64,)

(a.) Heart  
(b.) Lateral vessel  
(c.) Ventral vessel  
(d.) Dorsal vessel

The internal buds of freshwater sponges are otherwise called.  
(a.) Choanocyte  
(b.) Gemmule  
(c.) Osculum  
(d.) Blastula

Fertilization in earthworm occurs in  
(a.) Cocoon  
(b.) Spermathecae  
(c.) Coelom  
(d.) Seminal vesicles

What is common among Planaria and Hydra?  
(a.) Both belong to phylum-Coelenterata  
(b.) Both are diploblastic  
(c.) Both have regenerative capacity  
(d.) Both have a water vascular system

If a live earthworm is pricked with a needle on its outer surface without damaging its gut, the fluid that comes out is  
(a.) Excretory fluid  
(b.) Coelomic fluid  
(c.) Haemolymph  
(d.) Slimy mucus

In frog, chromosome number is reduced to half  
(a.) When polar body is separated  
(b.) When polar body is divided  
(c.) When polar body is separated  
(d.) When polar body is separated

Which one of the following is not a characteristic of phylum-Annelida?  
(a.) Closed circulatory system  
(b.) Segmentation  
(c.) Pseudocoelom  
(d.) Ventral nerve cord

Tissue level of organisation is seen in  
(a.) Platyhelminthes  
(b.) Chordata  
(c.) Arthropoda  
(d.) None of these

In which one of the following the genus name, its two characters and its class/phylum are correctly matched?  
Genus Two characters Class/phylum  
(a.) Salamandra :  
(i) A tympanum  
Amphibia represents ear  
(ii) Fertilization is external  
(b.) Pteropus:  
(i) Skin possesses  
Mammalia  
hair  
(ii) Oviparous  
(c.) Aurelia:  
(i) Cnidoblast  
Coelenterata  
(ii) Organ level  
of organization  
(d.) Ascaris:  
(i) Body Annelida  
segmented  
(ii) Males and females distinct

The animal that has 19 body segments, 6 pairs of appendages and respires through the trachea is  
(a.) Spider  
(b.) Prawn  
(c.) Scorpion  
(d.) Head louse

The notochord is derived from which of the following layers?  
(a.) Ectoderm  
(b.) Mesoderm  
(c.) Endoderm  
(d.) Placoderm

The type of asexual reproduction found in Hydra is  
(a.) Multiple fission  
(b.) Budding  
(c.) Sporulation  
(d.) Binary fission

Superposition image formation takes place in cockroach during  
(a.) Bright light  
(b.) Diffused light  
(c.) Dim light  
(d.) None of these

Phylum-Chordata is divided into sub-phyla namely  
(a.) Vertebrata, Protochordata and Urochordata  
(b.) Urochordata, Gnathochordata and Vertebrata  
(c.) Urochordata, Tunicata and Vertebrata  
(d.) Tunicata, Cephalochordata and Vertebrata

Taxonomically, which of the following set belongs to Arthropoda?  
(a.) Cattle fish, jelly fish, silver fish  
(b.) Bat, pigeon, kite  
(c.) Lobsters, spider, shrimps  
(d.) Oyster, otter, Octopus

The second largest aquatic vertebrate is  
(a.) Blue whale  
(b.) Whale shark  
(c.) Sea elephant  
(d.) Dugongs

Two common characters found in centipede, cockroach and crab are  
(a.) Compound eyes and anal cerci  
(b.) Jointed legs and chitinous exoskeleton  
(c.) Green gland and tracheae  
(d.) Book lungs and antennae

The animal that never performs locomotion is  
(a.) Ascaris  
(b.) Leucosolenia  
(c.) Both (a) and (b)  
(d.) Hydra

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

Hemicyclops belongs to the class  
(a.) Cyclostomata  
(b.) Ostracodermi  
(c.) Gnathostomata  
(d.) Pisces

How many hearts are found in earthworm?  
(a.) 8 (four pairs)  
(b.) 2 (one pair)  
(c.) 6 (three pairs)  
(d.) 12 (six pairs)

Pseudocoelomate animals belong to the phylum  
(a.) Platyhelminthes  
(b.) Arthropoda  
(c.) Mollusca  
(d.) None of these

Maximum life span of dog in year is  
(a.) 5  
(b.) 10  
(c.) 15  
(d.) 20

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

Leech secretes, which of the following anticoagulants?  
(a.) Hirudin  
(b.) Heparin  
(c.) Serotonin  
(d.) Histamine

In contrast to annelids, the Platyhelminthes show  
(a.) Radial symmetry  
(b.) Presence of pseudocoel  
(c.) Bilateral symmetry  
(d.) Absence of body cavity

Which of the following is true about phylumPlatyhelminthes?  
(a.) They are mostly ectoparasites  
(b.) They are mostly free-living  
(c.) They are mostly commensals  
(d.) They are mostly endoparasites

Tachyglossus is a connecting link between  
(a.) Reptiles and birds  
(b.) Amphibians and reptiles  
(c.) Birds and mammals  
(d.) Reptiles and mammals

The largest phylum in respect of number of species is  
(a.) Coelenterata  
(b.) Arthropoda  
(c.) Protozoa  
(d.) Porifera

Which one of the following pairs is mismatched?  
(a.) Pila globosa - Pearl  
(b.) Apis indica - Honey  
(c.) Kenia lacca - Lac  
(d.) Bombyx mori - Silk

What is missing in the following diagram?

![](data:application/octet-stream;base64,)

(a.) Podium and tiedamanns body  
(b.) Madrepori canal and madreporite  
(c.) Madreporite and podial canal  
(d.) None of the above

Wriggler is the larva of  
(a.) Mosquito  
(b.) Butterfly  
(c.) Housefly  
(d.) Cockroach

Syndactyly, prehensile tail and long protrusible tongue are the unique features of  
(a.) Rhesus monkey  
(b.) Archaeopteryx  
(c.) Horse fish  
(d.) Chamaeleon

Characteristic of coelenterate is occurrence of  
(a.) Nematocysts  
(b.) Polymorphism  
(c.) Flame cells  
(d.) Choanocytes

Protandry refers to the  
(a.) Excretory organs present in Arthropoda  
(b.) Connecting links between 2 phyla  
(c.) Earlier maturation of male sex organs than female sex organs  
(d.) Features in ancient missing links

The cockroach of genus-Blatta is also called  
(a.) German cockroach  
(b.) Australian cockroach  
(c.) Oriental cockroach  
(d.) American cockroach

The sclerite, covers the top to the head and the space between the two compound eyes in  
Periplaneta, is  
(a.) Clypeus  
(b.) Labrum  
(c.) Vertex  
(d.) Genae

In Rattus rattus, internally cerebral hemisphere are connected by  
(a.) Corpus striatum  
(b.) Corpus cardiacum  
(c.) Corpus callosum  
(d.) Corpus allatum

In Leucosolenia, gametes develop from  
(a.) Amoebocytes  
(b.) Archaeocytes  
(c.) Choanocytes  
(d.) Myocytes

Which of the following orders lack canine teeth?  
(a.) Rodentia  
(b.) Primates  
(c.) Carnivora  
(d.) None of these

The respiratory pigment present in cockroach is  
(a.) Haemoglobin  
(b.) Haemocyanin  
(c.) Oxyhaemoglobin  
(d.) None of these

Medusa is the reproductive organ of  
(a.) Hydra  
(b.) Aurelia  
(c.) Obelia  
(d.) Sea anemone

Conglobate gland is found in  
(a.) Female cockroach  
(b.) Male cockroach  
(c.) Anopheles mosquito  
(d.) Culex mosquito

Excretory organs in Taenia are  
(a.) Flame cells  
(b.) Nephridia  
(c.) Nephrons  
(d.) Kidneys

Cells that are peculiar to the phylum-Porifera  
(a.) Chimeras  
(b.) Chondrocytes  
(c.) Dendrocytes  
(d.) Choanocytes

Scorpion belongs to a class to which one of the following also belong?  
(a.) Ticks  
(b.) Crabs  
(c.) Both (a) and (b)  
(d.) Cockroaches

Animals that do not belong to class-Crustacea include  
(a.) Lobster and daphnia  
(b.) Millipede and Centipede  
(c.) Crab and shrimp  
(d.) None of the above

Periplaneta has no respiratory pigment in its blood because  
(a.) Air is conducted directly to the body tissues  
(b.) It has haemocoelom  
(c.) It has anaerobic respiration  
(d.) It lacks blood cells in the blood

"Triploblastic, unsegmented, acoelomate exhibiting bilateral symmetry and reproducing both asexually and sexuality, with some parasitic forms".  
The above description is the characteristic of phylum  
(a.) Annelida  
(b.) Ctenophore  
(c.) Cnidaria  
(d.) Platyhelminthes

Butterfly belongs to  
(a.) Homoptera  
(b.) Procoptera  
(c.) Hemiptera  
(d.) Lepidoptera

Select which of the following is not an insect?  
(a.) Apis indica  
(b.) Aranea  
(c.) Anopheles  
(d.) None of these

Which worm may go very deep in soil up to 60-90 cm and form vertical and complicated burrows for their movement?  
(a.) Epigenic  
(b.) Endogenic  
(c.) Anecic  
(d.) Geophagic

Which one of the following features is common in silverfish, scorpion, dragon fly and prawn?  
(a.) Three pairs of legs and segmented body  
(b.) Chitinous cuticle and two pairs of antennae  
(c.) Jointed appendages and chitinous exoskeleton  
(d.) Cephalothorax and tracheae

Ascaris has  
(a.) Paired testes and single ovary  
(b.) Paired ovaries and single testis  
(c.) Single ovaries and single testis  
(d.) Paired ovaries and paired testes

In Pheretima, locomotion occurs with the help of  
(a.) Circular muscles  
(b.) Longitudinal muscles and setae  
(c.) Circular, longitudinal muscles and setae  
(d.) Parapodia

Which of the following is wrongly matched?  
(a.) Arthropoda - Cockroach  
(b.) Annelida - Hydra  
(c.) Echinodermata - Star fish  
(d.) Nemathelminthes - Ascaris

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 coerulus  
(c.) Viper russelli  
(d.) Hemibungarus

In which animal, diapharagm has no role in respiration?  
(a.) Frog  
(b.) Rat  
(c.) Camel  
(d.) Rabbit

Ecdysone is secreted from  
(a.) Insect  
(b.) Trematoda  
(c.) Nematode  
(d.) Polychaeta

Parthenogenesis is a term of  
(a.) Sexual reproduction  
(b.) Asexual reproduction  
(c.) Budding  
(d.) Regeneration

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

Which one of the following statements about certain given animals is correct?  
(a.) Roundworms (Aschelminthes) are pseudocoelomates  
(b.) Molluscs are acoelomates  
(c.) Insects are pseudocoelomates  
(d.) Flatworms (Platyhelminthes) are coelomates

Mark what is incorrect regarding to the phylumArthropoda  
(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

An egg laying mammal is  
(a.) Delphinus  
(b.) Macaca  
(c.) Ornithorhynchus  
(d.) Macropus

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

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

Platyhelminthes are also called  
(a.) Roundworms  
(b.) Flatworms  
(c.) Ringworms  
(d.) Hookworms

Molluse are usually  
(a.) Terrestrial and parasitic  
(b.) Aquatic and parasitic  
(c.) Aquatic or terrestrial  
(d.) None of these

The phylum-Mollusca lack, which one of the following  
(a.) Visceral hump  
(b.) Malpighian tubules  
(c.) Gills  
(d.) Radula

Which one is not found in testis of frog?  
(a.) Sertoli cell  
(b.) Seminiferous tubule  
(c.) Germinal cell  
(d.) Interstitial cell

Order-primata contains  
(a.) Shrew and hedgehog  
(b.) Bats and vampire  
(c.) Monkeys and man  
(d.) Horses and zebra

Salamander can regenerate  
(a.) Tail  
(b.) Limbs  
(c.) External gills  
(d.) All of these

Spiders belong to class  
(a.) Insect  
(b.) Chilopoda  
(c.) Diplopoda  
(d.) Archinda

Maximum diversity is found in which of the following phylum?  
(a.) Chordata  
(b.) Arthropoda  
(c.) Protozoa  
(d.) Annelida

Which of the following is properly matched?  
(a.) Platyhelminthes - Trematoda - Planaria  
(b.) Echinodermata - Asteroidea - Star fish  
(c.) Arthropoda - Insecta - Spider  
(d.) Mollusca - Cephalopoda - Unio

In nemathelminthes, the coelom not lined by peritoneum is called  
(a.) Acoelom  
(b.) Pseudocoelom  
(c.) Enterocoelom  
(d.) Haemocoel

In Mollusca, eye is present over a stalk, called  
(a.) Ostracum  
(b.) Operculum  
(c.) Ommatophores  
(d.) Osphradium

The Indian salamander is  
(a.) Siren  
(b.) Tylototriton  
(c.) Ambystoma  
(d.) Necturus

In earthworm, self-fertilization cannot occur due to  
(a.) Protogyny  
(b.) Protandry  
(c.) Epigyny  
(d.) Hypogyny

Animals are classified on the basis of their symmetry into..... groups  
(a.) 2  
(b.) 3  
(c.) 4  
(d.) 5

Book lungs are respiratory organs in  
(a.) Scorpion  
(b.) Prawn  
(c.) Snail  
(d.) Cockroach

Which of the following does not belong to phylum-Platyhelminthes?  
(a.) Fasciola  
(b.) Taenia  
(c.) Wuchereria  
(d.) Planaria

The presence of the tube feet is a characteristic feature of the phylum  
(a.) Arthropoda  
(b.) Annelida  
(c.) Nemathelminthes  
(d.) Echinodermata

Which one of the following exhibits concentric 'tube within tube' plan?  
(a.) Cbidaria  
(b.) Annelida  
(c.) Platyhelminthes  
(d.) Nematode

Choose the correct options for the following diagram

![](data:application/octet-stream;base64,)

(a.) A-Cnidcil, B-Refractile rod, C-Stylet  
(b.) A-Thread tube, B-Contractile fibril, C-Lasso  
(c.) A-Stylet, B-Refractile rod, C-Capsule  
(d.) A-Cnidocil, B-Spine, C-Thread tube

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.

Teeth of rabbit are  
(a.) Thecodont  
(b.) Diphyodont  
(c.) Heterodont  
(d.) All of these

The male cockroach can be identified by the presence of  
(a.) Collaterial gland  
(b.) Green gland  
(c.) Broad abdomen  
(d.) Anal style

Two-chambered heart is a feature of  
(a.) Amphibians  
(b.) Fishes  
(c.) Reptiles  
(d.) Birds

Which of the following statements are correct?  
I. Venom of cobra is neurotoxic.  
II. Venom of sea snake is neurotoxic.  
III.Venom of viper is haemotoxic.  
(a.) I, II and III  
(b.) I and III  
(c.) I and II  
(d.) II and III

Which of the following requires an invertebrate intermediate host?  
VI. Dugesia  
VII. Schistosoma}  
VIII. Echinococcus  
IX. Ancylostoma  
X. Wuchereria  
(a.) III and IV  
(b.) II and V  
(c.) III and V  
(d.) I and IV

The study of snakes is called  
(a.) Herpetology  
(b.) Ophiology  
(c.) Saurology  
(d.) Ornithology

Coxal glands are excretory organs in  
(a.) Birds  
(b.) Scorpions  
(c.) Porifers  
(d.) Annelids

The point by which Annelida advanced over Nematoda is  
(a.) True coelom  
(b.) Metameric segmentation  
(c.) Closed circulation  
(d.) All of the above

Larva of Sycon is  
(a.) Parenchymula  
(b.) Amphiblastula  
(c.) Redia  
(d.) Trochophore

The Mediterranean type of popular fowls are called  
(a.) White leghorn  
(b.) New Hampshire  
(c.) Plymouth rock  
(d.) Rhode island red

Which one is absent in frog?  
(a.) Phrenic nerve  
(b.) Renal portal vein  
(c.) Both (a) and (b)  
(d.) None of these

Tube-within-tube body plan is found in which animal?  
(a.) Euspongia  
(b.) Fasciola  
(c.) Hydra  
(d.) None of these

Which is common between earthworm, leech and centipede?  
(a.) They have Malpighian tubules  
(b.) They are hermaphrodite  
(c.) They have ventral nerve cord  
(d.) They have no legs

Each male genital opening of Pheretima has separate openings of  
(a.) Two ducts  
(b.) Three ducts  
(c.) Five ducts  
(d.) Four ducts

Which of the following are amphibians?

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(a.) and   
(b.) and   
(c.) and   
(d.) and

Which character is found only in mammals?  
(a.) Neck  
(b.) Diaphragm  
(c.) Optic lobes of brain  
(d.) Tail

Spermathecae in Pheretima is located in the segments  
(a.) 14 to 18  
(b.) 10 to 13  
(c.) 6 to 10  
(d.) 6 to 9

The skull of frog is  
(a.) Tricondylic  
(b.) Monocondylic  
(c.) Dicondylic  
(d.) Non-condylic

Phylum that exhibit radial or radial like symmetry are  
(a.) Coelenterates  
(b.) Echinoderms  
(c.) Ctenophores  
(d.) All of these

To which taxonomic group does whale belong to?  
(a.) Fishes  
(b.) Reptiles  
(c.) Arthropoda  
(d.) Mammals

Which of following has discoidal placenta?  
(a.) Rabbit  
(b.) Deer  
(c.) Sheep  
(d.) Pig

In mammals, the secondary palate is formed by the union of  
(a.) Premaxilla, pterygoid and squamosal bones  
(b.) Maxilla, quadrate and palatine bones  
(c.) Premaxilla, maxilla and palatine bones  
(d.) Premaxilla, quadrate and squamosal bones

Salamandra belongs to sub-class  
(a.) Apoda  
(b.) Urodela  
(c.) Anura  
(d.) None of these

Which stage in the life cycle of Taenia solium infects the intermediate host?  
(a.) Hexacanth larva  
(b.) Oncosphere  
(c.) Cysticercus larva  
(d.) Miracidium

The larval stage of a harmful insects, causing a cavity like pathological condition in human subcutaneous tissue, is  
(a.) Naiad  
(b.) Nymph  
(c.) Maggot  
(d.) Wriggler

Find the odd example.  
(a.) Sea lily  
(b.) Sea fan  
(c.) Sea cucumber  
(d.) Sea urchin

The pseudocoelomate among these is  
(a.) Porifera  
(b.) Annelida  
(c.) Aschelminthes  
(d.) Mollusca

Zoological name of common Indian krait is  
(a.) Bungarus caeruleus  
(b.) Ophiophagus Hannah  
(c.) Viper russeli  
(d.) Naja naja

Dry skin with scales or scutes without gland is a characteristic of  
(a.) Fishes  
(b.) Reptilia  
(c.) Amphibia  
(d.) Aves

Which among the following is an Indian monkey?  
(a.) Ramapithecus  
(b.) Macaca  
(c.) Gorilla  
(d.) Pongidae

What is common between parrot, Platypus and kangaroo?  
(a.) Homeothermy  
(b.) Toothless jaws  
(c.) Functional post-anal tail  
(d.) Ovoparity

Which one of the following groups of three animals each is correctly matched with their one characteristic morphological feature?  
Animal  
Morphological Feature  
(a.) Liver fluke, sea anemone, sea cucumber Bilateral symmetry  
(b.) Centipede, prawn, sea urchin Jointed appendages  
(c.) Scorpion, spider, cockroach Ventral solid central nervous system  
(d.) Cockroach, locust, Taenia Metameric  
segmentation

Which of the following groups includes only arthropods?  
(a.) Prawn, Schistosoma, Planaria  
(b.) Cockroach, scorpion, prawn  
(c.) Chiton, Neopilina, scorpion  
(d.) Chiton, prawn, cockroach

Gonads of Obelia occur  
(a.) On blastocyst  
(b.) In hydrula stage  
(c.) In radial canals of medusa  
(d.) At bases of tentacles of medusa

The function of clitellum in Pheretima is  
(a.) Formation of cocoon  
(b.) Secretion of hormone  
(c.) Nutrition of sperm  
(d.) Respiration

Which is not correct for birds?  
(a.) Exothermic  
(b.) Pneumatic bones  
(c.) Lung with air sacs  
(d.) Amniotes

Trygon has  
(a.) Two chambered heart  
(b.) The males have claspers  
(c.) Presence of gill slits  
(d.) All of the above

Hydra captures the victim by injecting the chemical  
(a.) Kaliotoxin  
(b.) Hypnotoxin  
(c.) Toxoplasmin  
(d.) Sarafotoxin

Pneumatic bones are expected to be found in  
(a.) House lizard  
(b.) Flying fish  
(c.) Pigeon  
(d.) Tadpole of frog

The colour of the body in earthworm is brown due to  
(a.) Porphyrin  
(b.) Haemoglobin  
(c.) Blood  
(d.) Haemocyanin

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

What is common among silver fish, scorpion, crab and honey bee?  
(a.) Compound eyes  
(b.) Poion glands  
(c.) Jointed appendages  
(d.) Metamorphosis

Ovoviviparity is seen in this caecilian  
(a.) Wuchereria  
(b.) Typhlonectus  
(c.) Ichthyophis  
(d.) Uraeotyphlus

The flightless bird among the following is  
(a.) Columba  
(b.) Neophron  
(c.) Struthio  
(d.) Corvus

Which of the following animals have a single opening to the outside that serves both as mouth as well as anus?  
(a.) Octopus  
(b.) Asterias  
(c.) Ascidia  
(d.) Fasciola

Which of the following is true of Aves?  
(a.) They are poikilotherms and have a three chambered heart  
(b.) Tiny pebbles eaten by some birds and are used in  
crushing  
(c.) They have 10 pairs of cranial nerves  
(d.) All of the above

Which of the following is incorrect for Aves?  
(a.) Heart is four chambered and animals are oviparous  
(b.) Presence of air cavities in bones and presence of feathers on the body  
(c.) Digestive tract has additional chambers and animals are homiothermous  
(d.) The forlimbs are not modified into wings

Which of the following snake is non-poisonous?  
(a.) Cobra  
(b.) Krait  
(c.) Viper  
(d.) Python

A gradual decrease in the size of the tail during metamorphosis in the life cycle of frog is a good example for  
(a.) Programmed cell death  
(b.) Cell necrosis  
(c.) Cell senescence  
(d.) Pinocytic activity

One very special feature in the earthworm  
Pheretima is that  
(a.) The typhlosole greatly increases the effective absorption area of the digested food in the intestine  
(b.) The S-shaped setae embedded in the integument are the defensive weapons used against the enemies  
(c.) It has a long dorsal tubular heart  
(d.) Fertilization of eggs occurs inside the body

Which one of the following feature is common to leech, cockroach and scorpion?  
(a.) Nephridia  
(b.) Ventral nerve cord  
(c.) Cephalization  
(d.) Antennae

Organ system level of organisation is observed in  
(a.) Chordates  
(b.) Annelids  
(c.) Molluscs  
(d.) All of these

Jacobson's organs which are additional olfactory organs are present in  
(a.) Rat  
(b.) Snakes  
(c.) Man  
(d.) All of these

Characteristic cells of Hydra are  
(a.) Archaeocytes  
(b.) Thesocytes  
(c.) Cnidoblasts  
(d.) Trophocytes

Which of the following group will be amniotes?  
(a.) Hermidactylus - Salamander - Manis  
(b.) Ornithorhynchus - Struthio - Necturus  
(c.) Anguis - Eudynamis - Pteropuss  
(d.) None of the above

The number of heart chambers found in cockroach is  
(a.) 4  
(b.) 7  
(c.) 5  
(d.) 13

Abdominal ganglia in cockroach are found in segments  
(a.) 1, 2, 3, 4, 6 and 7  
(b.) 1, 2, 3, 4, 5 and 6  
(c.) and 8  
(d.) 8,9 and 10

Biradial symmetry and lack of cnidoblasts are the characteristics of  
(a.) Starfish and sea anemone  
(b.) Ctenoplana and Beroe  
(c.) Aurelia and Paramecium  
(d.) Hydra and starfish

Which is not a feature of annelids?  
(a.) Metameric segmentation  
(b.) Nephridia  
(c.) Psedocoelom  
(d.) Clitellum

Which one of the following animals possesses high regeneration capacity?  
(a.) Planaria  
(b.) Taenia  
(c.) Salpa  
(d.) Periplaneta

The location of lymph glands in Pheretima is  
(a.) and segments  
(b.) to segments  
(c.) to the last segments  
(d.) segments

WBCs of frog are  
(a.) Nucleated amoeboid  
(b.) Biconvex  
(c.) Concave  
(d.) Non-nucleated

In echolocation, the animal that produces high frequency sounds is  
(a.) Monkey  
(b.) Butterfly  
(c.) Squirrel  
(d.) Bat

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

The number of gills present in osteichthyes is  
(a.) 2 pairs  
(b.) 6 pairs  
(c.) 5 pairs  
(d.) 4 pairs

The nitrogeneous 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

Third cleavage of frog's development is  
(a.) Vertical  
(b.) Equatorial  
(c.) Latitudinal  
(d.) None of these

Which one of the following characters is not typical of the class-Mammalia?  
(a.) Seven cervical vertebrae  
(b.) Thecodont dentition  
(c.) Ten pairs of cranial nerves  
(d.) Alveolar lungs

Identify the correct pair of birds with a raft-like keel and lacking preen gland and syrinyx  
(a.) Tinamus and Apteryx  
(b.) Rhea and Dromeous  
(c.) Casuarius and Struthio  
(d.) Kiwi and Rhea

Which animals have all developed echolocation system like that of bats?  
(a.) Wild cats  
(b.) Beavers  
(c.) Primates  
(d.) Whales and dolphins

In earthworms, setae are present in all segments, expect the  
(a.) First and the last segments  
(b.) First and the clitellum  
(c.) First segments  
(d.) First, clitellum and last segments

Which of the following characters is present essentially in chordates?  
(a.) Ventral spinal chord  
(b.) Dorsal heart  
(c.) Pharyngeal gill slits  
(d.) Blood flow in forward direction in ventral blood vessels

Feeding type of animals belonging to phylumPorifera is  
(a.) Raptorial feeders  
(b.) Suctorial feeders  
(c.) Filter feeders  
(d.) None of these

A transverse section of Pheretima taken through the segment is observed in microscope.  
Which of the following structures can be observed in the section?  
(a.) Stomach, dorsal blood vessel, ventral blood vessel, supraoesophageal vessel, anterior loops, ring vessel and micronephridia  
(b.) Stomach, dorsal blood vessel, ventral blood vessel, lateral hearts, ring vessels and pharyngeal nephridia  
(c.) Intestine, dorsal blood vessel, ventral blood vessel, supraoesophageal vessel and septal nephridia  
(d.) Stomach, dorsal blood vessel, sub-neural blood vessel and lateral hearts

Ampullae of Lorenzini are present in  
(a.) Fish  
(b.) Lizard  
(c.) Frog  
(d.) Rabbit

Animal undergoes inactive stage during winter known as  
(a.) Aestivation  
(b.) Hibernation  
(c.) Adaptation  
(d.) Acclimatization

Which is not correct?  
(a.) Ovaries matured first in earthworm  
(b.) Spermatheca present in 6-9 segments  
(c.) Male genital apertures at 18 segment  
(d.) One pair of ovary in 13 segment

Budding is found in  
(a.) Sycon  
(b.) Hydra  
(c.) Fasciola  
(d.) Obelia

Sub-class-Prototheria is related with egg laying mammal such as  
(a.) Kangaroo  
(b.) Echidna  
(c.) Primate  
(d.) None of these

Which one of the following is not a bird?  
(a.) Magpie  
(b.) Albatross  
(c.) Himalayan quail  
(d.) Bufo

The limbless amphibian is  
(a.) Ichthyophis  
(b.) Hyla  
(c.) Rana  
(d.) Salamandra

Which one of the following has a biradial symmetry?  
(a.) Paramecium  
(b.) Jellyfish  
(c.) Cockroach  
(d.) Sea anemone

Pearl is produced in the bivalve belonging to the genus  
(a.) Ostraea  
(b.) Pinctada  
(c.) Pecten  
(d.) Lamellidens

Stink gland is found in  
(a.) and terga of cockroach  
(b.) and terga of cockroach  
(c.) and sterna of cockroach  
(d.) and sterna of cockroach

Proboscis gland in Balanoglossus is associated with  
(a.) Digestion  
(b.) Respiration  
(c.) Circulation  
(d.) Excretion

The velocity of conduction of nerve impulse in frog is  
(a.)   
(b.) Same as of electricity  
(c.) Faster than sound  
(d.)

Pouched mammals are  
(a.) Prototherians  
(b.) Metatherians  
(c.) Eutherians  
(d.) Therians

In Pheretima, gizzard, buccal cavity, pharynx, oesophagus, pharyngeal nephridia receive the blood from which of the following blood vessel?  
(a.) Supra oesophageal  
(b.) Lateral oesophageal  
(c.) Dorsal blood  
(d.) Subneural

Choose the animals that belong to phylumEchinodermata 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

Which of the following organs in earthworm neutralizes human acid present in humus?  
(a.) Typhlosole  
(b.) Calciferous glands  
(c.) Intestinal caecum  
(d.) Gizzard

In bony ventebrates, the laying down of none is often preceded by the presence of  
(a.) Chitin  
(b.) Starch  
(c.) Cartilage  
(d.) Platelets

Arthropods are characterized by  
(a.) Jointed appendages  
(b.) Open blood vascular system  
(c.) Triploblastic  
(d.) All of the above

Annelids have a central nerve cord that is  
(a.) Impermeable to   
(b.) Hollow  
(c.) Dorsal  
(d.) Ventral

The sea snakes have  
(a.) Cylindrical tail  
(b.) Dry horny scale at tail end  
(c.) Laterally compressed tail  
(d.) Dorso-ventrally flattened tail

Excretory organ in phylum-Hemichordata is  
(a.) Proboscis gland  
(b.) Gills  
(c.) Collar  
(d.) None of these

Which of the following animals is sanguivorous?  
(a.) Nereis  
(b.) Tapeworm  
(c.) Earthworm  
(d.) Hirudinaria

The unique character of animals belonging to class-Mammalia is  
(a.) Only mammals possesses hair on skin  
(b.) Completely four chambered heart  
(c.) Presence of mammary glands  
(d.) Fertilisation is internal

Bone marrow is absent in  
(a.) Reptiles  
(b.) Amphibians  
(c.) Aves  
(d.) Mammals

In which of the following animals, post anal tail is found?  
(a.) Earthworm  
(b.) Lower invertebrate  
(c.) Scorpion  
(d.) Snake

Which of the following is colourless Hydra?  
(a.) Hydra fusca  
(b.) Hydra viridis  
(c.) Hydra oligactis  
(d.) Hydra vulgaris

Excretion in phylum-Porifera is  
(a.) Ureotelic  
(b.) Uricotelic  
(c.) Ammoniotelic  
(d.) Aminotelic

Dugesia belongs to which class  
(a.) Trematoda  
(b.) Cestoda  
(c.) Turbellaria  
(d.) None of these

Changes that allow the conversion of larva into adult, is called  
(a.) Metagenesis  
(b.) Alternation  
(c.) Metamorphosis  
(d.) Metastasis

Sea horse is  
(a.) A bird  
(b.) A mammal  
(c.) An amphibian  
(d.) A fish

Tubular heart of cockroach has how many chambers?  
(a.) 10  
(b.) 13  
(c.) 12  
(d.) 11

Select the statement that explain neoteny  
(a.) Neonatal forms are found in mammals  
(b.) Larval stages become sexually mature  
(c.) Third larval stage of Ascaris shows need any  
(d.) None of the above

Which of the following is not a feature of Protopterus?  
(a.) Breathes through lungs  
(b.) Walks by fins used as legs  
(c.) Cannabilism  
(d.) It gives birth to young ones

The poisonous fluid present in nematocyst of Hydra is  
(a.) Venom  
(b.) Haematin  
(c.) Toxin  
(d.) Hypnotoxin

Nephridia in Pheretima are formed from  
(a.) Mesenchyme  
(b.) Endoderm  
(c.) Mesoderm  
(d.) Ectoderm

Study the following features of a fish  
I. It is a crossopterygian fish  
II. It is found in the river Chalumnae  
III. It does not exhibit aestivation  
IV. It is an urecotelic animal  
Which of the above are true to 'Neoceratodus'  
(a.) I and II  
(b.) II and IV  
(c.) I and III  
(d.) I and IV

Which one of the following match is incorrect?  
Column I Column I  
(a.) Garden lizard Hemidactylus flavirisidis  
(b.) Mountain lizard Varanus  
(c.) Worm lizard Rhineura  
(d.) Collared lizard Iguana

When the circulatory system lacks arteries, veins and capillaries, it is called as  
(a.) Closed type  
(b.) Mixed type  
(c.) In appropriate information  
(d.) Open type

In Pheretima, the lateral hearts that connect the supra oesophageal blood vessel with ventral blood vessel are located in which segments?  
(a.) 7 and 9  
(b.) 18 and 19  
(c.) 14 and 15  
(d.) 12 and 13

Aves are divided into the following sub-classes  
(a.) Neornithes and Anasbrnithes  
(b.) Archaeornithes and Anguis  
(c.) Archaeornithes and Neornithes  
(d.) Anguis and Anasbrnithes

The worker honey bee normally lives for about (a.) 10 days  
(b.) 15 days  
(c.) 30 days  
(d.) 90 days

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

Solenocytes and nephridia are respectively found in  
(a.) Platyhelminthes and Annelida  
(b.) Annelida and Nematoda  
(c.) Cnidaria and Mollusca  
(d.) Mollusca and Echinodermata

In Echinodermata, tube feet are related with  
(a.) Locomotion  
(b.) Excretory system  
(c.) Respiratory system  
(d.) Reproductive system

Which of the following is correct for the circulatory system of cockroach?  
(a.) It is present on the dorsal side and it has thirteen units of heart in abdominal region  
(b.) It is present on the ventral side and it has ten abdominal and three thoracic units of heart  
(c.) It is present on the ventral side and it has thirteen units of heart in abdominal region  
(d.) It is present on the dorsal side and it has ten abdominal and three thoracic units of heart

Which structure is not related to respiration in frog?  
(a.) Diaphragm  
(b.) Skin  
(c.) Buccal cavity  
(d.) Lungs

The characteristic larva of phylum-Coelenterata is  
(a.) Planula  
(b.) Cysticercus  
(c.) Rhabditiform  
(d.) Wriggler

Bioluminescence is well marked in  
(a.) Flatworms  
(b.) Ctenophores  
(c.) Cnidarians  
(d.) Aschelminthes

Class-Crustacea have the following features  
(a.) Tracheae and Malpighian tubules  
(b.) Tracheae and green glands  
(c.) Book gills and coxal glands  
(d.) Gills and antennal glands

The function of iris in the eyes of frog is to  
(a.) Alter the size of pupil  
(b.) Move nictitating membrane  
(c.) Refract light rays  
(d.) Move the lens forward and backward

The number of abdominal segments in male and female cockroach is  
(a.) 10,10  
(b.) 9,10  
(c.) 10,11  
(d.) 8,10

A four chambered heart is not found in  
(a.) Mammals  
(b.) Birds  
(c.) Snake  
(d.) Crocodile

Regeneration in Hydra will be faster, if it is cut off from  
(a.) Tentacles  
(b.) Hypostome  
(c.) Base  
(d.) All of these

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

Skeletal system in phylum-Arthropoda is  
(a.) Endoskeletal spicules structures  
(b.) Endoskeletal siliceous structures  
(c.) Exoskeletal calcareous covering  
(d.) Exoskeletal chitinous covering

Food storage in Leucosolenia occurs by  
(a.) Ostia  
(b.) Osculum  
(c.) Thesocytes  
(d.) Spongocoel

Which of the following characters are present in class-Crustacea?  
(a.) Ciphalothorax, gills and appendages  
(b.) Head and thorax, gills and appendages  
(c.) Cephalothorax, book gills and appendages  
(d.) Head and thorax, book gills and appendages

Osteichthyes and Chondrichthyes are similar in which of the following features?  
(a.) Presence of two chambered heart and ctenoid scales  
(b.) Presence of 10 pairs of cranial nerve and absence of neck  
(c.) Presence of opesthonephric kidneys and bony endoskeleton  
(d.) Presence of poison stings and electric organs

The animals belonging to phylum-Annelida use the following in locomotion  
(a.) Nephridia and nephridial pores  
(b.) Longitudinal and circular muscles  
(c.) Organs of bursa  
(d.) Spicules and ostia

Pheromone is  
(a.) A product of endocrine gland  
(b.) Used for animal communication  
(c.)   
(d.) Always protein

Rostellum and hooks are absent in the scolex of  
(a.) Taenia saginata  
(b.) Taenia solium  
(c.) Echinococcus granulosus  
(d.) Fasciola hepatica

Which of the following is absent in the mouth part of housefly?  
(a.) Labrum  
(b.) Epipharynx  
(c.) Mandibles  
(d.) Maxillary palps

The scientific name of Asian tiger mosquito is  
(a.) Aedes aegypti  
(b.) Aedes albopictus  
(c.) Aedes taeniornynchus  
(d.) Aedes albolineatus

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

Submaxillary glands of rabbit pour their secretions through  
(a.) Stenson's duct  
(b.) Ductus cholidocus  
(c.) Wharton's duct  
(d.) Naso-palatine duct

The enteronephric nephridia in Pheretima consists which of the following parts given below?  
XI. A nephrostome  
XII. Terminal nephridial duct  
XIII. Septal excretory canal  
XIV. Supra intestinal excretory canal  
XV. Long thick walled excretory canal  
(a.) II, V  
(b.) I, III, IV, V  
(c.) III, IV, V  
(d.) I, III, IV

The taste receptors of cockroach are  
(a.) Compounds eyes  
(b.) Companiform sensillae  
(c.) Palps of maxillary and labium  
(d.) Tactile hairs

Changes that allow the conversion of larva into adult, are called  
(a.) Metagenesis  
(b.) Alternation  
(c.) Metamorphosis  
(d.) Metastasis

Body cavity of adult Ascaris is  
(a.) Haemocoel  
(b.) Amphicoel  
(c.) Pseudocoel  
(d.) Schizocoel

Which of the following is not found in Hydra?  
(a.) Epithelio-muscular cells  
(b.) Cnidocyte  
(c.) Choanocyte  
(d.) Nerve cells

Which of the following have the highest number of species in nature?  
(a.) Insects  
(b.) Birds  
(c.) Angiosperms  
(d.) Fungi

Which statement is incorrect for animals  
belonging to class of Chondrichthyes?  
(a.) Presence of placoid scales  
(b.) Absence of air bladder  
(c.) Presence of cartilaginous endoskeleton  
(d.) Notochord is persistent only at larval stage,  
after that it disappears

One of the characteristic of Hydra is  
(a.) Predation  
(b.) Matamerism  
(c.) Hibernation  
(d.) Mimicry

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

Which of the following belong to phylumAnnelida?  
(a.) Hirudinaria, Nereis and Wuchereria  
(b.) Earthworms, Aphrodite and Pila  
(c.) Pheretima, Tubifex and Nereis  
(d.) Aplysia, Nereis and Dentalium

In phylum-Porifera opening through which water leaves the spongocoel is called  
(a.) Ostia  
(b.) Omadidia  
(c.) Osculum  
(d.) Choanocytes

Dermatobiasis in cattle is caused by  
(a.) Maggots of bot fly  
(b.) Wriggler of mosquito  
(c.) Nits of lead louse  
(d.) Drones of honeybee

Which of the following statements are true/false?  
I. Cell aggregate body plan is found in phylumPlatyhelminthes  
II. Radial symmetry is the most common symmetry found in animals  
III. Pseudocoelom is only found in phylumAschelminthes  
IV. All triploblastic animals have a true coelom  
V. Haemocoel is sometimes observed in animals belonging to phylum-Platyhelminthes  
(a.) I and V are true and II, III and IV are false  
(b.) II, III and V are true and I and IV are false  
(c.) I, II and III are true and IV and V are false  
(d.) I, II, IV and V are false, only III is true

The second layer of epidermis in rat integument is  
(a.) Stratum lucidium  
(b.) Stratum germinativum  
(c.) Stratum corneum  
(d.) Stratum granulosum

Engulfing of food either in solid or liquid is called  
(a.) Sporozoic nutrition  
(b.) Holozoic nutrition  
(c.) Parasitic nutrition  
(d.) Saprophytic nutrition

Sycon belongs to a group of animals which are best described as  
(a.) Multicellular with a gastrovascular system  
(b.) Multicellular having tissue organization, but no body cavity  
(c.) Unicellular or acellular  
(d.) Multicellular without any tissue organization

Natural pearl is  
(a.) A mollusk  
(b.) An annelid  
(c.) An arthropod  
(d.) An echinodermate

Which of the following statements is true?  
(a.) All living members of class-Cyclostomata are parasites on some fishes  
(b.) There are about 25,000 species in the classOsteichthyes  
(c.) Ciona belongs to the sub-phylum- Cephalocohordata  
(d.) Arthropods are diploblastic animals

Scientific name of king cobra is  
(a.) Naja naja  
(b.) Bungarus coerulus  
(c.) Naja Hannah  
(d.) Vipera russelli

Radula is found in  
(a.) Pila sp  
(b.) Chiton sp  
(c.) Lamellidens sp  
(d.) Pinctada sp

Down feathers are  
(a.) First feathery covering in birds  
(b.) Modified filoplumes found near nostrils and eyes  
(c.) Tail feathers  
(d.) Wing feathers

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

Ctenophora shows affinities with  
(a.) Cnidaria  
(b.) Aschelminthes  
(c.) Cephalopoda  
(d.) Turbellaria

Complete metamorphosis is found in  
(a.) House-fly and mosquito  
(b.) House-fly and cockroach  
(c.) Mosquito and cockroach  
(d.) None of the above

Accessory gland associated with the genital organs in female rats are  
I. Vestibular bartholin  
II.Cowper's gland  
III.Ampullary gland  
IV.Vesicular gland  
(a.) I and II  
(b.) III and II  
(c.) IV only  
(d.) I only

Which is not in pair in rabbit?  
(a.) Azygous vein  
(b.) Hemizygous vein  
(c.) Caudal vein  
(d.) All of these

Torsion of visceral mass is seen in animals belonging to class  
(a.) Cephalopoda  
(b.) Scaphopoda  
(c.) Amphineura  
(d.) Gastropoda

Metameric segmentation is the main feature of  
(a.) Annelida  
(b.) Echinodermata  
(c.) Arthropoda  
(d.) Coelenterata

Common feature in earthworm and cockroach is  
(a.) Cuticle (exoskeleton)  
(b.) Solid and ventral nerve cord  
(c.) Nephridia  
(d.) Malpighian tubules

Study the following sentences.  
[I.It](http://I.It) is a terrestrial arthropod.  
II.The prosoma bears a pair of chelicerae, a pair of the pedipalps and four pairs of walking legs.  
III.The metasoma ends in a telson.  
IV.First pair of walking legs are modified as poisonous claws.  
Which of the above are true for Heterometrus?  
(a.) I and III  
(b.) I and II  
(c.) I and IV  
(d.) III and IV

Undifferentiated totipotent cells of sponges, are  
(a.) Archaeocytes  
(b.) Porocytes  
(c.) Trophocytes  
(d.) Myocytes

Which one of the following is a matching set of phylum and its three examples?  
(a.) Cnidaria - Bonellia, Physalia, Aurelia  
(b.) Platyhelminthes - Planaria, Schistosoma, Enterobius  
(c.) Mollusca - Loligo, Teredo, Octopus  
(d.) Porifera - Spongilla, Euplectella, Pennatula

The snake eating snake is  
(a.) Black cobra  
(b.) King cobra  
(c.) Rattle snake  
(d.) Anaconda

Which of the following shows polymorphism?  
(a.) Physalia  
(b.) Trypanosoma  
(c.) Termite  
(d.) All of these

In Arthropoda, head and thorax are often fused to form cephalothorax, but in which one of the following classes, the body is divided into head, thorax and abdomen?  
(a.) Insecta  
(b.) Myriapoda  
(c.) Crustacea  
(d.) Arachnida and Crustacea

Absence of circulatory system in Hydra is compensated by  
(a.) Pseudocoelomic fluid  
(b.) Gastrovascular cavity  
(c.) Presence of tentacles  
(d.) None of these

Sea fan belongs to  
(a.) Coelenterata  
(b.) Porifera  
(c.) Echinodermata  
(d.) Mollusca

Which of the following blood vessels in the circulatory system of frog has more oxygenated blood?  
(a.) Pulmocutaneous artery  
(b.) Pulmocutaneous vein  
(c.) Pulmonary artery  
(d.) Precaval veins

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

In the pectoral girdle of frog, there is a cup like cavity on each side called  
(a.) Acetabulum  
(b.) Sigmoid arc  
(c.) Glenoid cavity  
(d.) Thoracic cavity

The number of segments on the anal cerci of cockroach is  
(a.) 12  
(b.) 15  
(c.) 18  
(d.) 16

Pylangium in frog is found in  
(a.) Conus arteriosus  
(b.) Sinus venosus  
(c.) Atrium  
(d.) Ventricle

In which one of the following the genus name, its two characters and its class/phylum are correctly matched?  
Genus Two characters Class/Phylum  
(a.) Salamandra  
(i) A tympanum  
Represents ear  
(ii) Fertilisation is external Amphibian  
(b.) Pteropus  
(i) Skin possesses hair  
(ii) Oviparous Mammalia  
(c.) Aurelia  
(i) Cnidoblast  
(ii) Organ level of organisation Coelenterata  
(d.) Ascaris  
(i) Body segmented  
(ii) Males and females distinct Annelida

Reproduction in Ctenoplana takes place by  
(a.) Budding  
(b.) Sexual reproduction  
(c.) Binary fission  
(d.) Multiple fission

The cloaca in frog is a common chamber for the urinary tract, reproductive tract and  
(a.) Alimentary canal  
(b.) Portal system  
(c.) Hepatic portal vessels  
(d.) Notochord

Spider web is formed by a fluid secreted by its  
(a.) Abdominal gland  
(b.) Salivary gland  
(c.) Cephalothorax  
(d.) None of these

Which insect is useful for us?  
(a.) Periplaneta  
(b.) Musca  
(c.) Bombyx  
(d.) Mosquitoes

Thigmotaxis is not shown by  
(a.) Paramecium  
(b.) Amoeba  
(c.) Ascaris  
(d.) Hydra

The function of typhlosole in earthworm  
(a.) Is to secrete digestive juice  
(b.) Is to slowdown rate of passage of food  
(c.) Increase absorptive area of intestinal epithelium  
(d.) Have no function

Which of the following is an insect?  
(a.) Moth  
(b.) Mites  
(c.) Prawn  
(d.) Scorpion

Which type of respiratory organs are present in spiders and scorpions?  
(a.) Book lungs  
(b.) Gills  
(c.) Gill books  
(d.) Lungs

Which of the following is not a Porifera  
(a.) Sycon  
(b.) Spirulina  
(c.) Euspongia  
(d.) Spongilla

Which of the following phylum or class exhibit the presence of a notochord?  
(a.) Arthropods  
(b.) Echinodermata  
(c.) Chondrichthyes  
(d.) Porifera

Which of the following is correctly matched?  
(a.) Wallago attu - Cat fish  
(b.) Tengra - Carp  
(c.) Catla catla - Cat fish  
(d.) Payas - Carp

In honey bee, the drones are  
(a.) Sterile male  
(b.) Fertile male  
(c.) Fertile female  
(d.) Sterile female

Water vascular system is found in  
(a.) Mollusca  
(b.) Arthropoda  
(c.) Annelida  
(d.) Echinodermata

Acoustic spots in frog are present in  
(a.) Osseous labyrinth  
(b.) Carotid  
(c.) Membranous labyrinth  
(d.) All of these

The part of spermatheca of earthworm that acts as store house of spermatozoa is  
(a.) Ampulla  
(b.) Diverticulum  
(c.) Both (a) and (b)  
(d.) None of these

Solenocytes are associated with  
(a.) Respiration  
(b.) Digestion  
(c.) Nutrition  
(d.) Excretion

An animal without anus is  
(a.) Unio  
(b.) Pheretima  
(c.) Fasciola  
(d.) Periplaneta

In cockroach, the first pair of wings are known as  
(a.) Sterna  
(b.) Terga  
(c.) Integument  
(d.) Tegmina

Sub classes for class-Mammalia are  
(a.) Eutheria and Metatheria  
(b.) Ornithorhynchus and Pleurorhynchus  
(c.) Hemiechinus and Macropus  
(d.) Theria and Prototheria

Which one of the following is correctly matched regarding earthworm?  
(a.) Buccal cavity to segment  
(b.) Stomach to segment  
(c.) Typhlosole to segment  
(d.) Testes to segment

Blastula of frog has  
(a.) Blastopore  
(b.) Blastocoel  
(c.) Archenteron  
(d.) Gastropore

What is true about Mollusc?  
(a.) Presence of metameric segmentation  
(b.) Presence of mantle cavity and coelom cavity  
(c.) Presence of tissue level of organisation  
(d.) Presence of chitinous exoskeleton

The intermediate host of Schistosoma is  
(a.) Snail  
(b.) Mosquito  
(c.) Housefly  
(d.) Sheep

Which one of the following is the true description about an animal concerned?  
(a.) Earthworm - The alimentary canal consists of a sequence of pharynx, oesophagus, stomach, gizzard and intestine  
(b.) Frog - Body is divisible into three regions : head, neck and trund  
(c.) Rat - Left kidney is slightly higher in position than the right one  
(d.) Cockroach - 10 pairs of spiracles (2 pairs on thorax and 8 pairs on abdomen)

Right lung of rat has four lobes. The left lung has how many lobe/lobes?  
(a.) One  
(b.) Two  
(c.) Three  
(d.) Four

Trochophore is the larva of  
(a.) Neopilina  
(b.) Chiton  
(c.) Pila  
(d.) All of these

Common characteristic of mosquitoes, houseflies and cockroaches are  
(a.) One pair each of wings and halters  
(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

Taenia solium derives its energy from the breakdown of  
(a.) Nucleic acids  
(b.) Amino acids  
(c.) Glycogen  
(d.) Glycerol

Which one of the following abnormalities in the host is associated to Wuchereria, Plasmodium and Fasciola respectively?  
XVI. Parasitic castration  
XVII. Hyperplasia  
XVIII. Febrile paroxysm  
XIX. Peritonitis  
XX. Lymphangitis  
(a.) V, III and II  
(b.) V, III and I  
(c.) II, IV and V  
(d.) II, IV and II

Wuchereria bancrofti is a common filarial worm. It belongs to phylum  
(a.) Platyhelminthes  
(b.) Nemathelminthes  
(c.) Annelida  
(d.) Coelenterata

Among the following, colonial insects are  
(a.) Locusts  
(b.) Mosquitoes  
(c.) White ants  
(d.) Bed bug

In frog's heart which of the following is considered as pace-maker?  
(a.) Pylangium  
(b.) Synangium  
(c.) Sinus venosus  
(d.) Truncus arteriosus

The generic name of tusk shell is  
(a.) Dentalium  
(b.) Chaetoderma  
(c.) Chiton  
(d.) Neopilina

Third moulting in Ascaris larva takes place in  
(a.) Lung  
(b.) Liver  
(c.) Heart  
(d.) Intestine

The animal with bilateral symmetry in young stage, and radial pentamerous symmetry in the adult stage belongs to the phylum  
(a.) Annelida  
(b.) Mollusca  
(c.) Cnidaria  
(d.) Echinodermata

Choanocyte in an ascon type of canal system, is lined by  
(a.) Porocyte  
(b.) Incurrent  
(c.) Apopyle  
(d.) Spongocoel

The dorsal diverticulum of urethra in male rabbit is  
(a.) Uterus  
(b.) Uterus masculinus  
(c.) Prepuse  
(d.) Vas deferens

Unique features of phylum-Ctenophora is  
(a.) Presence of comb plates and comb jellies  
(b.) Presence of comb plates only  
(c.) Presence of tentacles only  
(d.) Alteration of generation only

Classification of sponges is primarily based on the  
(a.) Body organization  
(b.) Body plan  
(c.) Skeleton  
(d.) Canal system

Which type of kidneys are found in amphibians?  
(a.) Holonephric  
(b.) Mesonephric  
(c.) Pronephric  
(d.) Metanephric

Symmetry in Cnidaria is  
(a.) Radial  
(b.) Bilateral  
(c.) Pentamerous  
(d.) Spherical

Platyhelminthes are  
(a.) Asymmetrical  
(b.) Radially symmetrical  
(c.) Bilaterally symmetrical  
(d.) None of these

Animals having a built in thermostat to maintain constant body temperature are known as  
(a.) Biothermic  
(b.) Poikilothermic  
(c.) Oligothermic  
(d.) Homeothermic

Spermathecae in earthworm is  
(a.) For producing sperm  
(b.) For storage of sperm obtained from male earthworm  
(c.) Both (a) and (b)  
(d.) None of the above

Body forms present in Cnidarians are  
(a.) Cylindrical and umbrella-shaped  
(b.) Corals and coral reefs  
(c.) Polyp and medusa  
(d.) Cnidoblasts and nematocytes

Which of the following is present in phylumPorifera?  
(a.) Amoebocytes  
(b.) Thesocytes  
(c.) Choanocytes  
(d.) All of these

Which of the following statements is false?  
(a.) Male round worm is smaller than female  
(b.) Earthworms are hermaphrodites  
(c.) Echinoderms are protostomous coelomates  
(d.) Human teeth are anatomically comparable to scales of shark

Branch of zoology dealing with the study of fishes is known as  
(a.) Herpetology  
(b.) Ichthyology  
(c.) Mammology  
(d.) Ornithology

Read the following paragraph.  
An insect whose mouthparts are biting and chewing type in the larval condition, while they are siphoning type in the adult and this insect gives an economically important substance during yet another stage of its development.  
The insect is  
(a.) Anopheles  
(b.) Laccifer  
(c.) Bombyx  
(d.) Apis

Skeletal system in echinoderms is  
(a.) Formed by the distension of the water vascular system  
(b.) Calcareous exoskeleton  
(c.) Siliceous endoskeleton  
(d.) None of the above

Excretory organs in echinoderm is  
(a.) Nephridia  
(b.) Green glands  
(c.) Flame cells  
(d.) None of these

An acoelomate animal with bilateral symmetry, is  
(a.) Hydra  
(b.) Liver fluke  
(c.) Physalia  
(d.) Obelia

The excretory organ in cockroach is  
(a.) Malpighian corpuscle  
(b.) Malpighian tubules  
(c.) Hepatic caecae  
(d.) Metanephridia

Which of the following is a harmful social insect?  
(a.) Termite  
(b.) Bombyx mori  
(c.) Tachardia lacca  
(d.) Apis indica

Which one of the following is an exotic carp species?  
(a.) Barbus stigma  
(b.) Cyprinus carpio  
(c.) Labeo bata  
(d.) Cirrhinus mrigala

Temperature changes in the environment affect most of the animals which are  
(a.) Homeothermic  
(b.) Aquatic  
(c.) Poikilothermic  
(d.) Desert living

Pearls are produced by the animals of phylum  
(a.) Annelida  
(b.) Arthropoda  
(c.) Mollusca  
(d.) Echinodermata

Which one of the following groups of animals is correctly matched with its one characteristic feature without even a single exception?  
(a.) Chordata - possess a mouth provided with an upper and a lower jaw  
(b.) Chondrichthyes - possess cartilaginous endoskeleton  
(c.) Mammalia - give birth to young ones  
(d.) Reptilia - possess 3-chambered heart with one incompletely divided ventricle

'Water-vascular' system is found in  
(a.) Sea-anemone  
(b.) Sea-pen  
(c.) Sea-cucumber  
(d.) Sea-horse

Which of these is referred to as 'Venus flower basket'?  
(a.) Spongilla  
(b.) Sycon  
(c.) Euplectella  
(d.) Cliona

Rhabditiform is the larva of  
(a.) Hydra  
(b.) Platyhelminthes  
(c.) Ascaris  
(d.) Earthworm

From the following fishes, identify the one with a aglomerular kidney.  
(a.) Sphyrna  
(b.) Tilapia  
(c.) Cirrhinus  
(d.) Exocoetus

The peculiar pungent smell of cockroach is produced by the secretion of  
(a.) Pheromones  
(b.) Flame cells  
(c.) Abdominal glands  
(d.) Cervical glands

Choose a limbless amphibian from the list given below  
(a.) Salamander  
(b.) Necturus  
(c.) Ichthyopis  
(d.) All of these

Which of the following is not absent in Mollusca?  
(a.) Heart  
(b.) Pedicellaria  
(c.) Ctenidia  
(d.) Mantle

Which of the following has enterocoelomate invertebrate?  
(a.) Echinodermata  
(b.) Arthropoda  
(c.) Annelida  
(d.) Mollusca

The zoological name of North Indian hare is  
(a.) Oryctolagus cuniculus  
(b.) Lipus ruficaudatus  
(c.) Lipus nigricollis  
(d.) Sorex araneus

Metamorphosis in cockroach is regulated by  
(a.) Corpora cardiaca  
(b.) Brain  
(c.) Thyroid  
(d.) Corpora allata

The life span of honey bee drone is  
(a.) 3-4 months  
(b.) 1-2 months  
(c.) 6-7 months  
(d.) 10-12months

Bat belongs to order  
(a.) Chiroptera  
(b.) Lagmorpha  
(c.) Urodla  
(d.) Hymenoptera

Which of the following statements are true/false?  
I. Mollusca possess cellular level of organisation  
II. Arthropoda are true coelomates  
III. Platyhelminths are pseudocoelomates  
IV. Ctenophora have bilateral symmetry Choose the correct option  
(a.) I and II are True  
(b.) Only II are True  
(c.) I and IV are True  
(d.) II, III and IV are True