(2023)

1. Match List-I with List-II.

List -I		List – II		
(A)	Contractile	(I)	Astenas	
、 <i>,</i>	vacuole			
(B)	Water	(II)	Amoeba	
()	vascular			
	system			
(C)	Canal system	(III)	Spongilla	
(D)	Flame cells	(IV)	Taenia	

Choose the correct answer from the options given below :

- (a) A-IV, B-II, c-I, D-III
- (b) A-I, B-IIII, C-II, D-IV
- (c) A-III, B-II, C-I, D-IV
- (d) A-II, B-I, C-III, D-IV
- Radial symmetry is NOT found in adults of phylum _____. (2023)
 - (a) Hemichordata
 - (b) Coelenterata
 - (c) Echinodermata
 - (d) Ctenophora
- 3. Select the correct statements with reference to chordates.

A. Presence of a mid-dorsal, solid and double nerve cord.

- B. Presence of closed circulatory system.
- C. Presence of paired pharyngeal gill slits.
- D. Presence of dorsal heart

E. Triploblastic pseudocoelomate animals. Choose the correct answer from the options given below:

- (a) B and C only
- (b) B, D and E only
- (c) C, D and E only
- (d) A, C and D only
- 4. The unique mammalian characteristics are: (2023)
 - (a) Hairs, pinna and mammary glands
 - (b) Hairs, pinna and indirect development
 - (c) Pinna, monocondylic skull and mammary glands
 - (d) Hairs, tympanic membrane and mammary glands

- 5. Which of the following animals has three chambered heart? (2022)
 - (a) Pteropus
 - (b) Scoliodon
 - (c) Hippocampus
 - (d) Chelone
- 6. Match List-I with List-II

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	Lits -I		List -II
(A)	Chlamydomonas	Ι	Conidia
(B)	Penicillium	II	Zoospores
(C)	Hydra	III	Gemmules
(D)	Sponge	IV	Buds

Choose the correct answer from the options given below :

- (a) A-IV, B-III, C-II, D-I
- (b) A-I, B-IV, C-III, D-II
- (c) A-II, B-I, C-IV, D-III
- (d) A-III, B-ii, C-I, D-IV
- 7. Select the incorrect statements with respect to Cyclostomes: (2022)
 - (A) They lack scales and paired fins.
 - (B) They have circular mouth with jaws.
 - (C) They bear 6-15 pairs of gills.
 - (D) They migrate to deep sea for spawning. Choose the most appropriate answer from the options given below:
 - (a) (a) and (d) only
 - (b) (a) and (b) only
 - (c) (b) and (c) only
 - (d) (b) and (d) only
- 8. Exoskeleton of arthropods is composed of: (2022)
 - (a) Cutin
 - (b) Cellulose
 - (c) Chitin
 - (d) Glucosamine
- Assertion (A) : All vertebrates are chordates but all chordates are not vertebrates.
 Reason (R) : Notochord is replaced by vertebral column in the adult vertebrates.
 (2022)
 - (a) Both A and R are correct and R is the correct explanation of A
 - (b) Both A and R are correct but R is not the correct explanation of A

- (c) A is the correct but R is not correct
- (d) A is not correct but R is correct.

Matc	h List-I with List-II		(2021)
	List-I		List-II
А.	Metamerism	(i)	Coelenterata
В.	Canal system	(ii)	Ctenophora
C.	Comb plates	(iii)	Annelida
D.	Cnidoblasts	(iv)	Porifera

10.

Choose the correct answer from the options given below

- (a) A-(iii) B-(iv) C-(i) D-(ii)
- (b) A-(ii) B-(iv) C-(ii) D-(i)
- (c) A-(iv) B-(i) C-(ii) D-(iii)
- (d) A-(iv) B-(iii) C-(i) D-(ii)
- 11. Which one of the following organisms bears hollow and pneumatic long bones? (2021)
 - (a) Hemidactylus
 - (b) Macropus
 - (c) Ornithorhynchus
 - (d) Neophron
- 12. Match the following

(2021)	

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	List-I		List-II
А.	Physalia	(i)	Pearl oyster
В.	Limulus	(ii)	Portuguese Man of War
C.	Ancylostoma	(iii)	Living fossil
D.	Pinctada	(iv)	Hookworm

- (a) A-(iv) B-(i) C-(iii) D-(ii)
- (b) A-(ii) B-(iii) C-(iv) D-(i)
- (c) A-(i) B-(iv) C-(iii) D-(ii)
- (d) A-(ii) B-(iii) C-(i) D-(iv)
- 13. Read the following statements (2021)
 - A. Metagenesis is observed in helminths
 - B. Echinoderms are triploblastic and coelomate animals
 - C. Round worms have organ-system level of Body organisation
 - D. Comb plates present in ctenophores help in digestion
 - E. Water vascular system is a characteristic of echinoderms

Choose the correct answer from the options given below

- (a) A, B and C are correct
- (b) A, D and E are correct
- (c) B, C and E are correct
- (d) C, D and E are correct
- 14. Which of the following statements are true for the phylum-Chordata? (2020)

- (a) In urochordata, notochord extends from head to tail and it is present throughout their life
- (b) In vertebrata, notochord is present during the embryonic period only
- (c) Central nervous system is dorsal and hollow
- (d) Chordata is divided into 3 subphyla: Hemichordata, Tunicata and Cephalochordata
- 15. Bilaterally symmetrical and acoelomate animals are exemplified by (2020)
 - (a) Platyhelminthes
 - (b) Aschelminthes
 - (c) Annelida
 - (d) Ctenophora
- 16. Match the following columns and select the correct option (2020)

	Column I		Column II
(1)	6 - 15 pairs of gill slits	(i)	Trygon
(2)	Heterocercal caudal fin	(ii)	Cyclostomesr
(3)	Air bladder	(iii)	Chondrichthyes
(4)	Poison sting	(iv)	Osteichthyes

- (1) (2) (3) (4)
- (a) (iii) (iv) (i) (ii)
- (b) (iv) (ii) (iii) (i)
- (c) (i) (iv) (iii) (ii)
- (d) (ii) (iii) (iv) (i)
- 17. Match the following columns and select the correct option (2020)

	et ep 11011		(====)
	Column I		Column II
(1)	Gregarious, polyphagous pest	(i)	Asterias
(2)	Adult with radial symmetry and	(ii)	Scorpion
	larva with bilateral symmetry		
(3)	Book lungs	(iii)	Ctenoplan a
(4)	Bioluminescence	(iv)	Locusta

- 1 2 3 4
- (a) (iv) (i) (ii) (iii)
- (b) (iii) (ii) (i) (iv)
- (c) (ii) (i) (iii) (iv)
- (d) (i) (iii) (ii) (iv)

18. Match the following columns and select the correct option (2020 Covid Re-NEET)

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	Column I		Column II
(1)	Aptenodytes	(i)	Flying fox
(2)	Pteropus	(ii)	Angel fish
(3)	Pterophyllum	(iii)	Lamprey
(4)	Petromyzon	(iv)	Penguin

(1) (2) (3) (4)

- (a) (iii) (iv) (i) (ii)
- (b) (iv) (i) (ii) (iii)
- (c) (ii) (i) (iv) (iii)
- (d) (iii) (iv) (ii) (i)
- 19. Match the following group of organisms with their respective distinctive characteristics and select the correct option (2020 Covid Re-NEET)

	Organisms	-	Characteristics
(1)	Platyhelmi nthes	(i)	Cylindrical body with no segmentation
(2)	Echinoder ms	(ii)	Warm blooded animals with direct development
(3)	Hemichord ates	(iii)	Bilateral symmetry with incomplete digestive system
(4)	Aves	(iv)	Radial symmetry with indirect development

(1) (2) (3) (4)

- (a) (ii) (iii) (iv) (i)
- (b) (iv) (i) (ii) (iii)
- (c) (i) (ii) (iii) (iv)
- (d) (iii) (iv) (i) (ii)
- 20. Which of the following option does correctly represent the characteristic features of phylum Annelida?

(2020 Covid Re-NEET)

- (a) Triploblastic, segmented body and Bilaterally symmetrical
- (b) Triploblastic, flattened body and acoelomate condition
- (c) Diploblastic, mostly marine and radially symmetrical

- (d) Triploblastic, unsegmented body and bilaterally symmetrical
- 21. All vertebrates are chordates but all chordates are not vertebrates, why? (

2020 Covid Re-NEET)

- (a) Ventral hollow nerve cord remains throughout life in some chordates
- (b) All chordates possess vertebral column
- (c) All chordates possess notochord throughout their life
- (d) Notochord is replaced by vertebral column in adult of some chordates
- 22. Match the following organisms with their respective characteristics (2019)

		-	· · · · · /
A.	Pila	(i)	Flame cells
В.	Bombyx	(ii)	Comb plates
C.	Pleurobrachia	(iii)	Radula
D.	Taenia	(iv)	Malpighian tubules

- Select the correct option from the following
- ABCD
- (a) (iii) (ii) (i) (iv)
- (b) (iii) (iv) (ii) (i)
- (c) (ii) (iv) (iii) (i)
- (d) (iii) (ii) (iv) (i)
- 23. Consider following features
 - A. Organ system level of organisation
 - B. Bilateral symmetry
 - C. True coelomates with segmentation of body

Select the correct option of animal groups which possess all the above characteristics (2019)

- (a) Annelida, Arthropoda and Chordata
- (b) Annelida, Arthropoda and Mollusca
- (c) Arthropoda, Mollusca and Chordata
- (d) Annelida, Mollusca and Chordata
- 24. Which of the following animal does not undergo metamorphosis? (2018)(a) Earthworm
 - (a) Earthworn
 - (b) Tunicate
 - (c) Moth
 - (d) Starfish
- 25. Which one of these animals is not a homeotherm? (2018)
 - (a) Macropus
 - (b) Chelone
 - (c) Camelus
 - (d) Psittacula

26.	Identify charact digestiv (a) Amp	v the vertebrat terised by crop ve system ohibia	e gro and	up of animals gizzard in its (2018)		(b)	Respiratory system	-	Cockroach, Tapeworm, Starfish
27	(b) Rep (c) Aves (d) Oste	tilia s eichthyes of poriferans, th	ne spo	ngocoel is lined		(c)	Bilateral symmetry	-	Hydra, Tapeworm, Sea urchin
21.	with fla (a) Osti (b) Osc (c) Cho	agellated cells ca a ula anocytes	alled	(2017)		(d)	Jointed appendages	-	Prawn, Centipede, Grasshopper
28.	 (d) Mes Which combin (a) Seal (b) Dolp (c) What (d) Tryg 	enchymal cells among thes ation of aquatio s, Dolphins, Sh phins, Seals, Tr des, Dolphins, S gon, Whales, Se	e is e mam arks ygon Seals als	the correct mals? (2017)	34.	Choc (a) Al he (b) Al (c) Al (d) Al	ose the correct s Il reptiles have a eart Il pisces have gil berculum Il mammals are Il cyclostomes de	tatem three lls cov vivipa o not	ent (2016 - II) e-chambered vered by an arous possess jaws and
29.	Which Horse? (a) Equ (b) Peri (c) Caba (d) Feru	of the following idae ssodactyla allus 18	g repro	esents order of (2017)	35.	pa Whic not s (a) O (b) B	ured fins th one of the foll hared by birds a ssified endoskel reathing using l	lowing and m eton ungs	g characteristic is nammals? (2016 - I)
30.	 (a) Abso (a) Abso (b) Ven (c) Phan (d) Phan 	important c nordates share v ence of notocho tral tubular ner rynx with gill sli rynx without gil	haract with C rd ve cor its Il slits	teristic that hordates is (2017) d	36.	(c) Vi (d) W Whice featu corre	viparity Varm blooded na th of the fo tres always l esponding group Cartilaginous endoskeleton	ture llowin nolds of an	g characteristic true for the himals? (2016 - I) Chondrichthyes
31.	Choose Petrom (a) The (b) The	the false s yzon circulatory syst body is devoid	statem tem is of scal	ent regarding (2017) closed les		(b) (c)	Viviparous Possess a mouth with an	-	Mammalia Chordata
32.	 (c) Mou (d) It m Which exhibite (a) Bila (b) Rad (c) Asyr 	th is circular an igrates to the ou of the follo ed by echinoder teral ial nmetrical	nd lac cean fo wing rm lary	ks jaws or spawning symmetry is vae? (2017)		(d)	3-chambered heart with one incompletely divided ventricle	-	Reptilia
33.	(d) Bira Which match animals (a)	dial of the followin of feature wit s? Feature Metameric segmentation	g repi th the	essents correct given set of (2017) Animals Earthworm, Leech, Liver fluke	37.	Whic India (a) G (b) R (c) B (d) S	th is the nation ? angetic shark iver dolphin lue whale ea-horse	nal a	quatic animal of (2016 - I)

- 38. Which of the following feature is not present in the phylum-arthropoda? (2016 - I)
 - (a) Chitinous exoskeleton
 - (b) Metameric segmentation
 - (c) Parapodia
 - (d) Jointed appendages
- 39. Which of the following characteristics is mainly responsible for diversification of insects on land? (2015)(a) Exoskeleton
 - (b) Eyes
 - (c) Segmentation
 - (d) Bilateral symmetry
- 40. Which of the following animal is not viviparous? (2015)
 - (a) Platypus
 - (b) Whale
 - (c) Flying fox (bat)
 - (d) Elephant
- 41. Which of the following represents the correct combination without any exception?

(2015)

	Characteristics	Class
(a)	Sucking and circular mouth;	Cyclostomata
	jaws absent, integument without	
	scales; paired appendages	
(b)	Body covered with feathers; skin moist and glandular; fore- limbs	Aves
	form wings; lungs with air sacs	
(c)	Mammary glands; hair on body;	Mammalia
	pinnae; two pairs of limbs	
(d)	Mouth ventral; gills without	Chondrichyes
	operculum; skin with placoid	
	scales, persistent	

- 42. Which of the following endoparasites of humans does show viviparity? (2015)(a) Trichinella spiralis
 - (b) Ascaris lumbricoides
 - (c) Ancylostoma duodenale
 - (d) Enterobius vermicularis
- 43. Body having mesh work of cell, internal cavities lined with food filtering flagellated cells and indirect development are the (2015 Re) characteristics of phylum (a) Porifera

 - (b) Mollusca
 - (c) Protozoa
 - (d) Coelenterate
- 44. A jawless fish, which lays eggs in freshwater and whose ammocoetes larvae after metamorphosis return to the ocean is

(2015 Re)

- (a) Myxine
- (b) Neomyxine
- (c) Petromyzon
- (d) Eptatretus
- 45. Metagenesis refers to

(2015 Re)

- (a) Alternation of generation between asexual and sexual phases of organisms (b) Occurrence of a drastic change in form
- during post- embryonic development (c) Presence of a segmented body and parthenogenetic mode of reproduction
- (d) Presence of different morphic forms 46. Planaria possess high capacity of (2014)
 - (a) Bioluminescence (b) Metamorphosis
 - (c) Regeneration
 - (d) Alternation of generation
- 47. Select the taxon mentioned that represents both marine and fresh water species (2014) (a) Cnidaria

 - (b) Echinoderms
 - (c) Ctenophora
 - (d) Cephalochordata
- 48. A marine cartilaginous fish that can produce electric current is (2014)(a) Scoliodon
 - (b) Pristis
 - (c) Torpedo
 - (d) Trygon
- 49. One of the representatives of phylum arthropoda is (2013)(a) Flying fish
 - (b) Cuttlefish

- (c) Silverfish
- (d) Pufferfish
- 50. Match the name of the animal (Column-I) with one characteristics (Column-II) and the phylum/class (column-III) to which it belongs (2013)

	Column-I	Column-II	Column-III
(a	Adamsia	Radially	Porifera
)		symmetric	
		al	
(b	Petromyzo	Ectoparasi	Cyclostoma
)	n	te	ta
(c	Ichthyoph	Terrestrial	Reptilia
)	is		
(d	Limulus	Body	Pisces
)		covered	
		by	
		chitinous	
		exoskeleto	
		n	

- 51. Which of the following are correctly matched with respect to their taxonomic classification? (2013)
 - (a) Spiny anteater, Sea urchin, sea cucumber – Echinodermata
 - (b) Flying fish, cuttlefish, silverfish Pisces
 - (c) Centipede, millipede, spider, scorpion Insecta
 - (d) House fly, butterfly, tsetsefly, silverfish Insecta
- 52. Which group of animals belongs to the same phylum? (2013)
 - (a) Sponge, Sea anemone, Starfish
 - (b) Malarial parasite, Amoeba, Mosquito
 - (c) Earthworm, Pinworm, Tapeworm
 - (d) Prawn, Scorpion, Locusta

Answer Key				
S1. Ans. (d)	S28. Ans. (c)			
S2. Ans. (a)	S29. Ans. (a)			
S3. Ans. (a)	S30. Ans. (c)			
S4. Ans. (a)	S31. Ans. (d)			
S5. Ans. (d)	S32. Ans. (a)			
S6. Ans. (c)	S33. Ans. (d)			
S7. Ans. (d)	S34. Ans. (d)			
S8. Ans. (c)	S35. Ans. (c)			
S9. Ans. (a)	S36. Ans. (a)			
S10. Ans. (a)	S37. Ans. (b)			
S11. Ans. (d)	S38. Ans. (c)			
S!2. Ans. (b)	S39. Ans. (a)			
S13. Ans. (c)	S40. Ans. (a)			
S14. Ans. (c)	S41. Ans. (d)			
S15. Ans. (a)	S42. Ans. (a)			
S16. Ans. (d)	S43. Ans. (a)			
S17. Ans. (a)	S44. Ans. (c)			
S18. Ans. (b)	S45. Ans. (a)			
S19. Ans. (d)	S46. Ans. (c)			
S20. Ans. (a)	S47. Ans. (a)			
S21. Ans. (d)	S48. Ans. (c)			
S22. Ans. (b)	S49. Ans. (c)			
S23. Ans. (a)	S50. Ans. (b)			
S24. Ans. (a)	S51. Ans. (d)			
S25. Ans. (b)	S52. Ans. (d)			
S26. Ans. (c)				
S27. Ans. (c)				
	I			

Solutions

S1. Ans.(d)

(A) Contractile vacuoles are found in single-celled organisms like Amoeba
(II). They help in osmoregulation by expelling excess water out of the cell.
(B) A water vascular system is a unique characteristic of echinoderms such as Asterias (I), a genus of starfish. This system is involved in locomotion, feeding, respiration, and excretion.

(C) The canal system is characteristic of sponges such as Spongilla (III). It aids in the circulation of water for feeding, respiration, and excretion.

(D) Flame cells are part of the excretory system in platyhelminthes like Taenia (IV), commonly known as tapeworm. These cells function in osmoregulation and excretion.

S2. Ans.(a)

Radial symmetry is a type of symmetry where an organism can be divided into similar halves by more than two planes passing through the central axis. This type of symmetry is found in organisms that tend to meet their environment in all directions, such as aquatic animals.

S3. Ans.(a)

Chordates are defined by having certain specific anatomical features at some point during their development. The correct attributes of chordates are:

1. Presence of a dorsal, hollow nerve cord (not a mid-dorsal, solid and double nerve cord as mentioned in statement A)

2. Presence of a closed circulatory system.

3. Presence of paired pharyngeal gill slits.

- 4. Presence of a post-anal tail.
- 5. Presence of a notochord.

S4. Ans.(a)

1. Hair or fur: Mammals are the only animals that have hair. This hair helps to insulate the body to maintain a constant body temperature.

2. Mammary glands: These are glands that, in females, produce milk for the nourishment of young ones. This is a characteristic feature of all mammals and is, in fact, the feature that gives this group its name.

3. The presence of pinnae (external ears): Most mammals have pinnae that help to collect and direct sound waves into the ear.

S5. Ans.(d)

Only (d) is correct

S6. Ans.(d)

• Penicillium asexually reproduces by conidia formation

• Chlamydomonas asexually reproduces by zoospores Hydra reproduces by budding whereas sponges produce gemmules for asexual reproduction

S7. Ans.(d)

Only (d) correct.

S8. Ans.(c)

Is the correct answer as chitin forms the exoskeleton is arthropods and is found in fungal cell wall. N-acetyl glucosamine is the monomeric unit. Cellulose is a polysaccharide. Cutin is a derived lipid.

S9. Ans.(a)

Is the correct answer because all chordates are divided into three subphyla - Urochordata, Cephalochordata and Vertebrata. In subphylum Vertebrata, notochord is replaced by bony or cartilaginous vertebral column in adults. Therefore, all vertebrates are chordates but all chordates are not vertebrates. S10. Ans.(a)

Metamerism-Annelida; Canal system-Porifera; Comb Plates-Ctenophora; Cnidoblasts- Coelen- terata

S11. Ans.(d)

Neophron (Aves) has hollow and pneumatic bones.

S12. Ans.(b)

Physalia-Portuguese man of war; Limulus-Living

Fossil; Ancylostoma-Hookworm; Pinctada-Pearl oyster

S13. Ans.(c)

Echinodermata are triploblastic and coelomate animal; Round worms have organ system level; water vascular system is a characterstics of echinodermata

- S14. Ans.(c)
 - The notochord is exclusively found in the larval tail of urochordata.
 - The notochord in cephalochordata

stretches from head to tail and is present throughout life.

- Vertebrata, Tunicata and Cephalochordata are the three subphyla of Chordata.
- Central nervous system (CNS) is dorsal and hollow.
- 15. Ans.(a)

Platyhelminthes are organ-level animals that are bilaterally symmetrical, triploblastic and acoelomate.

- S16. Ans.(d)
 - Cyclostomes have an extended body with 6-15 pairs of respiration gill slits.
 - Air is found in the bones of fish belonging to the class Osteichthyes.
 - Air bladder controls buoyancy.
 - The sting of Trygon, a cartilaginous fish, is poisonous.
 - The tail of chondrichthyes members

is elongated with a heterocercal caudal fin

- S17. Ans.(a)
 - Locusta is a polyphagous, gregarious pest.
 - Adult echinoderms (Asterias) have Radial symmetry while larvae have bilateral symmetry.
 - Scorpions Breathe via their book lungs.
 - Bioluminescence is a prominent feature of ctenophores (Ctenoplana).
- S18. Ans.(b)
 - Petromyzon Lamprey
 - Pteropus Flying fox
 - Penguin- Aptenodytes
 - Angel fish Pterophyllum
- S19. Ans.(d)

Platyhelminthes are organ-level animals that are bilaterally symmetrical, triploblastic and acoelomate.

Echinoderm larvae are bilaterally symmetrical, whereas adult echinoderms are radially symmetrical.

The development of free-swimming larva is indirect.

Hemichordates have a cylindrical body with an anterior proboscis, a collar and a lengthy trunk.

Aves are warm-blooded, direct-development creatures.

S20. Ans.(a)

Annelida have bilateral symmetry and organ-system level body organisation. They are coelomate animals that are triploblastic, metamerically segmented.

S21. Ans.(d)

During the embryonic period, members of the vertebrata subphylum have a notochord. In adulthood,

the notochord is replaced by a cartilaginous or bony vertebral column. Thus, all vertebrates are chordates, but all chordates are not vertebrates.

- S22. Ans.(b)
 - Pila is a type of mollusca. A file similar to rasping is contained in the mouth.
 - The radula is a feeding organ.
 - Bombyx is a symbiotic arthropoda. Bombyx excretes through tubules called malpighian tubules.
 - Pleurobrachia is a ctenophore. Their body has eight rows of ciliated comb plates on the outside that aid in movement.
 - Taenia is a platyhelminth, a parasitic worm. It contains specialised cells known as flame cells.
 - Osmoregulation and excretion are aided by flame cells.
- S23. Ans.(a)
 - The phyla Annelida, Arthropoda, and Chordata all have true segmentation. They are also true coelomates, with organ system level of organisation, bilateral symmetry.
- S24. Ans.(a)

Annelids develop directly so, earthworms do not have a larval stage.

S25. Ans.(b)

Reptilians, like Chelone, are poikilothermic, meaning their body temperature fluctuates depending on the climate.

S26. Ans.(c)

Food is swallowed by birds and stored in their crop. The meal subsequently goes through the stomach and into

the gizzard, where it might be ground with previously eaten stones.

S27. Ans.(c)

Choanocytes (collar cells) line the spongocoel (body cavity) and canals.

S28. Ans.(c)

Sharks and sting rays belong to the Chondrichthyes (cartilaginous fish) class whereas whales, dolphins

and seals are aquatic mammals that belong to the mammalia class.

S29. Ans.(a)

Horse – Equidae

- S30. Ans.(c)
 - Slits in the pharyngeal gills can be found in both hemichordates and chordates.
 - Chordates are the only animals that have a notochord.
 - Non-chordates have a distinguishing Feature called the ventral tubular nerve cord.
- S31. Ans.(d)

The circulation is closed. Cyclostomes are marine creatures that travel to fresh water to procreate.

They die within a few days of spawning. After metamorphosis, their larvae return to the sea.

S32. Ans.(a)

Adult echinoderms have radial symmetry but their larvae have bilateral symmetry.

S33. Ans.(d)

The appendages of the prawn, centipede and grasshopper are joined.

S34. Ans.(d)

Cyclostomes have a sucking mouth with a circular shape jaws. Scales are missing from their bodies and they have paired fins.

Except for crocodiles (4 chambered), all reptiles have a three-chambered heart.

Except for platypus, all mammals are viviparous.

S35. Ans.(c)

Birds are oviparous, which means they develop directly.

Except for the oviparous Ornithorhynchus, all mammals are viviparous.

S36. Ans.(a)

Chondrichthyes are streamlined marine organisms with a cartilaginous endoskeleton.

Ornithorhynchus (Platypus)-Oviparous-Mammal

S37. Ans.(b)

The river dolphin is India's national aquatic animal; it can only be found in freshwater or brackish water.

S38. Ans.(c)

Except for parapodia, phylumarthropoda has all three traits.

Nereis (an Annelid) has lateral appendages called parapodia that help them swim.

S39. Ans.(a)

The exoskeleton of arthropods which contains chitin and mucopolysaccrides, is one of their most distinguishing features. Arthropods' success is linked to their hard exoskeleton which serves as an armour against predators and a barrier against desiccation in a variety of environments.

S40. Ans.(a)

Platypus (Ornithorhynchus) is an oviparous mammal.

S41. Ans.(d)

Mouth ventral; gills without operculum; skin with placoid scales, persistent notochord are the features

of cartilaginous fishes.

S42. Ans.(a)

Trichinella spiralis is a human endoparasitic worm that lives in the intestine. It is a viviparous creature.

Trichinella spiralis causes a condition known as trichinosis. Diarrhoea, nausea, abdominal pain, muscular pain and other symptoms can occur. S43. Ans.(a)

The skeleton of sponges is usually made up of spicules (calcareous or silicious) or spongin fibres.

The spongocoel, or paragastric cavity, is shared by all sponges and is lined by flagellated choanocytes.

S44. Ans.(c)

Jawless vertebrates belong to the Cyclostomata class. They are saltwater animals that travel to fresh

water to procreate. Petromyzon, for example.

S45. Ans.(a)

Alternation of generation is seen in several cnidarians that have both polyp and medusa forms (metagenesis).

S46. Ans.(c)

Planaria have a strong regeneration capability.

S47. Ans.(a)

Ctenophora, Echinoderms, and Cephalochordata are all marine animals but cnidaria are both fresh water and marine..

S48. Ans.(c)

Torpedo have electric organs that generate electricity.

S49. Ans.(c)

The phylum arthropoda includes silverfish.

S50. Ans.(b)

Petromyzon is an ectoparasite belonging to the cyclostomata class.

S51. Ans.(d)

The housefly, butterfly, tsetse fly and silverfish are all members of this class.

Arthropoda is a phylum of arthropods while Insecta is a class of insects.

S52. Ans.(d)

The phylum arthropods includes prawns, scorpions and locusts.