

Exercise - I (Conceptual Questions)

Build Up Your Understanding

NON-CHORDATES

- If a food particle is placed near the osculum of a sponge then it will -
 (1) Be thrown away
 (2) Be ingested
 (3) Rotate around osculum
 (4) Be ingested first and then thrown out through ostia

BAD005

- Bath sponge is common name of :
 (1) *Spongilla*
 (2) *Euspongia*
 (3) *Euplectella*
 (4) *Leucosolenia*

BAD006

- Which one of the following is Coelenterate?
 (1) Sea urchin (2) Sea cucumber
 (3) Sea fan (4) Sea horse

BAD007

- Which animal do not possess larval stage in its life cycle?
 (1) *Ascaris* (2) Frog
 (3) *Taenia* (4) *Pheretima*

BAD008

- Which of the following is an Annelid?
 (1) sea horse (2) sea mouse
 (3) sea hare (4) sea pen

BAD009

- Which of the following characteristic is shared by all arthropods?
 (1) Complete metamorphosis
 (2) Wings
 (3) Jointed appendages
 (4) Tracheal system

BAD011

- Members of phylum Arthropoda lack one of the following feature :
 (1) External skeleton made of chitin
 (2) Compound eyes
 (3) Excretion by malpighian tubules
 (4) Usually a close type of blood vascular system

BAD012

- Cockroach, house fly and mosquitoes are insect because they have :-
 (1) Chitinous exoskeleton and body divided into head and cephalothorax
 (2) Six legs, compound eyes and body divided into head, thorax and abdomen
 (3) Segmented body with jointed feet and chitinous exoskeleton
 (4) Three pairs of legs, one pair of antennae and flame cells

BAD013

- Which of the following animal is considered as "Living fossil"?
 (1) *Limulus* (2) Spider
 (3) *Sycon* (4) Scorpion

BAD014

- Select the economically important insect :
 (1) *Locusta* (2) *Culex*
 (3) *Aedes* (4) *Apis*

BAD015

- Which animal has visceral hump ?
 (1) *Culex* (2) *Apis*
 (3) *Nereis* (4) *Pila*

BAD016

- Which mollusca is called tusk shell?
 (1) *Neopilina* (2) *Pila*
 (3) *Dentalium* (4) *Doris*

BAD017

- 13.** Secretion of shell in molluscs take place by:
 (1) Foot (2) Ink gland
 (3) Radula (4) Mantle
BAD018
- 14.** Which of the following characteristic is not of phylum mollusca?
 (1) Soft body covered usually by a shell
 (2) Segmented body
 (3) Triploblastic
 (4) Presence of coelom
BAD019
- 15.** The most characteristic feature of molluscs is the presence of :
 (1) Hard - body (2) Shell
 (3) Mantle (4) Foot
BAD020
- 16.** Open type of blood vascular system and presence of haemocyanin pigment are the characters of :
 (1) Mollusca (2) Annelida
 (3) Echinodermata (4) Hemichordata
BAD021
- 17.** Member of Echinodermata has a specific system, which is not found in other phylum, it is :
 (1) Canal system
 (2) Water vascular system
 (3) Respiratory system
 (4) Jointed appendages
BAD022
- 18.** Segmentation of body is not represented in:
 (1) Cray – fish (2) *Sepia*
 (3) Grass hopper (4) Silver fish
BAD023
- 19.** Which of the following is not related with Echinodermata ?
 (1) Madreporite (2) Parapodia
 (3) Marine habitat (4) Autotomy
BAD025
- 20.** Locomotory organs of echinoderms are :-
 (1) Tube feet (2) Setae
 (3) Parapodia (4) Pseudopodia
BAD026
- 21.** Absence of excretory organs, great power of regeneration and exclusively marine animals belongs to the phylum :-
 (1) Mollusca (2) Arthropoda
 (3) Echinodermata (4) Annelida
BAD027
- 22.** Stomochord (Buccal diverticulum) is present in:
 (1) *Amphioxus*
 (2) *Herdmania*
 (3) *Balanoglossus*
 (4) *Asterias*
BAD028
- 23.** Which of the following character does not belong to Arthropoda?
 (1) Closed circulatory system
 (2) Movable jaws
 (3) Segmented body
 (4) Jointed legs
BAD029
- 24.** Chiton is included in phylum :
 (1) Annelida (2) Arthropoda
 (3) Mollusca (4) Echinodermata
BAD030
- 25.** Coxal glands are the excretory organ of :
 (1) Cray fish (2) Devil fish
 (3) Jelly - fish (4) Scorpion
BAD031
- 26.** Most of the adult insects have six legs and:
 (1) Two antennae and four wings
 (2) Four antennae and four wings
 (3) Two antennae and two or four wings
 (4) Four wings and four eyes
BAD032

27. In *Hydra*, waste material of food digestion and nitrogenous waste material removed respectively from :

(1) Mouth and mouth
(2) Body wall and body wall
(3) Mouth and body wall
(4) Mouth and tentacles

BAD035

28. Given below are four matchings of an animal and its kind of respiratory organ :

A. Silver fish – Trachea
B. Scorpion – Book lung
C. Sea squirt – Pharyngeal gills
D. Dolphin – Skin

The correct matchings are :-

(1) A and D (2) A, B and C
(3) B and D (4) C and D

BAD036

29. In contrast to Annelids, the Platyhelminthes show :

(1) Absence of body cavity
(2) Presence of pseudocoel
(3) Radial symmetry
(4) Bilateral symmetry

BAD037

30. The canal system is characteristic feature of:

(1) Sponges (2) Helminthes
(3) Echinoderms (4) Coelenterates

BAD039

31. Which of the following is pseudoceolomate?

(1) *Hydra* (2) *Periplaneta*
(3) *Ascaris* (4) *Pheretima*

BAD041

32. *Sycon* belongs to a group of animals, which are best described as :

(1) Unicellular or acellular
(2) Multicellular without any tissue organization
(3) Multicellular with a gastrovascular system

(4) Multicellular having tissue organization, but no body cavity

BAD044

33. Which one of the following phyla is correctly matched with its general characteristics ?

(1) Porifera - Cellular level of organisation and external fertilisation
(2) Coelenterata - Diploblastic and mostly Asymmetric
(3) Aschelminthes - Pseudocoelomates and dioecious
(4) Hemichordata - Coelomates and closed circulatory system

BAD045

34. Which one of the following is a matching pair of a body feature and the animal possessing it?

(1) Canal system – *Asterias*
(2) Metagenesis – *Obelia*
(3) Dorsal nerve cord – *Pheretima*
(4) Muscular pharynx – *Taenia*

BAD047

35. One of the following animals is not hermaphrodite :

(1) Earthworm (2) Leech
(3) *Taenia* (4) *Ascaris*

BAD048

36. In Annelids formation of larva is usually absent but when present the larva is called:

(1) Tadpole (2) Planula
(3) Trochophore (4) Ephyra

BAD049

37. Excretion in most Annelids take place by :

(1) Kidneys (2) Flame cells
(3) Nephridia (4) Ciliated funnel

BAD050

38. Sea-anemone belongs to phylum :

(1) Protozoa (2) Porifera
(3) Coelenterata (4) Echinodermata

BAD054

39. Skeleton is made up of _____ in porifera.

- (1) Spicules (2) Spongin
(3) Both 1 and 2 (3) Chitin

BAD060

40. Find the odd

- (1) Sea fan
(2) sea horse
(3) sea cucumber
(4) sea lily

BAD061

41. Which animal has only cylindrical form?

- (1) *Physalia* (2) *Adamsia*
(3) *Hydra* (4) Both (2) and (3)

BAD062

42. Which animal is umbrella-shaped and free swimming?

- (1) *Aurelia* (2) Jelly-fish
(3) *Hydra* (4) (1) and (2)

BAD063

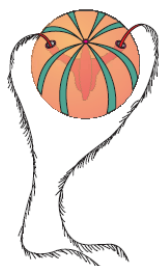
43. Corals have a skeleton composed of _____.

- (1) CaCO_3 (2) CaPO_4
(3) CaCl_2 (4) CaSiO_2

BAD064

44. Identify the animal shown in diagram

- (1) Tape worm
(2) *Pleurobrachia*
(3) *Nereis*
(4) Octopus



BAD065

CHORDATES

45. Choose the correct combination of the given option?

- (1) *Calotes* - garden lizard
(2) *Chameleon* - krait
(3) *Naja* - viper
(4) *Crocodilus* - tortoise

BAD066

46. Which one of the following mammalia live in water?

- (1) Bat (2) Platypus
(3) *Macropus* (4) Blue whale

BAD067

47. The distinguishing feature of all chordates is:

- (1) A ventrally placed nerve cord
(2) A water vascular system
(3) A chitinous exoskeleton
(4) An elastic rod (Notochord)

BAD068

48. Chordates possess :

- (1) Dorsal nerve cord placed below gut
(2) Single hollow nerve cord placed dorsal to gut
(3) Double ventral nerve cord
(4) Single, solid and ventral nerve cord

BAD069

49. In vertebrates, the notochord :

- (1) Persists throughout the life
(2) Is partially replaced by vertebral column
(3) Is completely replaced by vertebral column
(4) Is partially or fully replaced by vertebral column

BAD070

50. Which one is the distinguishing feature of all vertebrates?

- (1) An internal bony or cartilagenous skeleton
(2) A hairy body covering
(3) Presence of mammary glands
(4) Open type of circulatory system

BAD071

51. Which one of the following amphibia is common toad?

- (1) *Ichthyophis* (2) *Bufo*
(3) Frog (4) *Salamandra*

BAD076

52. Which of the following group of animals have a constant body temperature?

- (1) Reptiles, aves & Mammalia
- (2) Aves & cyclostomata
- (3) Pisces & amphibia
- (4) Aves & Mammalia

BAD079

53. Which is poikilothermic animal?

- (1) Tortoise (2) Pigeon
- (3) Penguin (4) Whale

BAD084

54. Which of the following is not the feature of snakes ?

- (1) Eggs (2) Limbs
- (3) Scales (4) Kidney

BAD085

55. Which of the following groups includes Endothermic animals (Homothermal) :

- (1) Crocodile, alligator, turtle
- (2) Whale, pigeon, bat
- (3) Sea-horse, dog fish, cat fish
- (4) Toad, frog, salamander

BAD086

56. Number of cranial nerves in a crocodile is :

- (1) 8-pairs (2) 10-pairs
- (3) 12-pairs (4) 14-pairs

BAD088

57. Mostly birds are :

- (1) Uricotelic and oviparous
- (2) Uricotelic and viviparous
- (3) Ammonotelic and oviparous
- (4) Uricotelic and ovoviviparous

BAD089

58. The primitive characters of Duck billed platypus suggest that it :

- (1) Is a degenerated mammals
- (2) Shows the stage between aves and mammals

(3) Shows the stage between reptiles and birds

(4) Shows the stage between reptiles and mammals

BAD090

59. Find out correct statement :

- (1) All birds can fly
- (2) All snakes are poisonous
- (3) All amphibians lay eggs in water
- (4) All mammals are viviparous

BAD091

60. Oviparous animal is :

- (1) *Scoliodon* (2) Viper
- (3) Scorpion (4) Cobra

BAD092

61. Characteristic of *Corvus* is :

- (1) Unisexual and sexual dimorphism absent
- (2) Bisexual and sexual dimorphism absent
- (3) Unisexual and sexual dimorphism present
- (4) Bisexual and sexual dimorphism present

BAD093

62. Which of the following is a "Lizard- bird"?

- (1) *Archaeopteryx*
- (2) *Struthio*
- (3) *Aptenodytes*
- (4) *Humming bird*

BAD094

63. Uropygial or preen glands occur in :

- (1) Reptiles (2) Birds
- (3) Amphibians (4) Mammals

BAD095

64. The character found only in birds is :

- (1) Toothless beak
- (2) Bipedal locomotion
- (3) Wings
- (4) Feathers

BAD098

65. Which of the following characters is not related to Aves?
 (1) Homiothermy and presence of oil glands in skin
 (2) Female genital organs of both sides functional
 (3) Female genital organs of one sides functional
 (4) Exoskeleton of feathers
BAD099
66. Muscular diaphragm is found in :
 (1) Amphibian (2) Mammal
 (3) Reptilian (4) Fish
BAD101
67. Whales are included in the same taxonomic class as :
 (1) Sharks (2) Crocodile
 (3) Sea horse (4) Gorilla
BAD102
68. Which of the following group of vertebrates have dicondylic skull?
 (1) Amphibia & mammals
 (2) Reptilia & Aves
 (3) Aves & mammals
 (4) Reptilia & mammals
BAD103
69. Hair are not found in adult whale, its body temperature is regulated by :
 (1) Sweat glands (2) Blubber
 (3) Blood circulation (4) Water
BAD104
70. Two chambered heart is the feature of :
 (1) Mammals (2) Aves
 (3) Amphibia (4) Pisces
BAD105
71. Which of the following animals have character of both reptiles and mammals?
 (1) *Ornithorhynchus* (2) *Pteropus*
 (3) *Macropus* (4) *Canis*
BAD106
72. An egg laying mammal is :
 (1) Kangaroo (2) Platypus
 (3) Koala (4) Whale
BAD107
73. Presence of gills in the tadpole of frog indicates that :
 (1) Fishes evolved from frog like ancestors
 (2) Frogs will have gills in future
 (3) Frogs evolved from gilled ancestors
 (4) Fishes were amphibious in the past
BAD108
74. Hollow air filled bones (pneumatic bones) occur in :
 (1) Mammals (2) Reptiles
 (3) Urodela (4) Aves
BAD109
75. Which of the following character is not found in all the chordates?
 (1) Diaphragm
 (2) Coelom
 (3) Pharyngeal gill slits
 (4) Dorsal nerve cord
BAD110
76. In which of the following animal post anal tail is found :
 (1) Earthworm
 (2) Lower invertebrate
 (3) Scorpion
 (4) Snake
BAD111
77. In which of the following notochord is present in embryonic stage :
 (1) All chordates (2) Some chordates
 (3) Vertebrates (4) Non-chordates
BAD112
78. Axolotl larva is the name of larva of :
 (1) *Amphioxus* (2) Silkworm
 (3) *Salamandra* (4) Round worm
BAD113

79. Most favourable land adaptation in reptiles is:
 (1) Lungs
 (2) Scales
 (3) Moist skin
 (4) Pentadactylous limbs

BAD115

80. *Ichthyophis* belongs to :
 (1) Amphibia (2) Mollusca
 (3) Annelida (4) Reptilia

BAD117

81. Air sacs connected to lungs supplement respiration in :
 (1) Lung fishes (2) Birds
 (3) Reptilia (4) Mammals

BAD120

82. Which of the following reptile is non-poisonous ?
 (1) Cobra (2) Krait
 (3) Viper (4) Python

BAD121

83. Tailed amphibian is :
 (1) *Ichthyophis* (2) Frog
 (3) *Salamandra* (4) Toad

BAD122

84. Monocondylar, Poikilothermal animals are:
 (1) Birds
 (2) Amphibia
 (3) Reptiles
 (4) Mammals

BAD123

85. Which one of the following is a true fish ?
 (1) Cray fish (2) Jelly fish
 (3) Silver fish (4) Cat fish

BAD124

86. Corpus callosum is found in the brain of :
 (1) Elephant (2) Pigeon
 (3) Crocodile (4) Frog

BAD125

87. One of the following is a very unique feature of the mammalian body :
 (1) Presence of muscular diaphragm
 (2) Four chambered heart
 (3) Rib cage
 (4) Homeothermy

BAD126

88. Which is the smallest taxonomic group having cranium, vertebral column, ventral heart, pulmonary respiration and two pairs of legs ?
 (1) Chordata (2) Gnathostomata
 (3) Vertebrata (4) Tetrapoda

BAD127

89. Which of the following has no teeth in its mouth?
 (1) Tortoise (2) Crocodile
 (3) *Hemidactylus* (4) *Draco*

BAD130

90. Feathers of birds are modified :
 (1) Epidermal scales (2) Bony scales
 (3) Plates (4) Scutes

BAD131

91. Identify the animal -



- (1) *Ascidia* (2) *Salpa*
 (3) *Amphioxus* (4) *Doliolum*

BAD132

92. Notochord is present only in larval tail of :
 (1) Urochordata
 (2) Cephalochordata
 (3) Vertebrata
 (4) Protochordates

BAD133

93. Vertebrates have ventral muscular heart with _____ chambers.
 (1) 2 (2) 3
 (3) 4 (4) All above

BAD134

94. Larve of _____ after metamorphosis return to the ocean.

- (1) *Scoliodon* (2) Shark
(3) Lamprey (4) Flying fish

BAD135

95. Air bladder is absent in _____.

- (1) Dog fish (2) *Catla*
(3) Rohu (4) Flying fish

BAD136

96. Sea horse is _____.

- (1) a bird (2) a mammal
(3) an amphibian (4) a fish

BAD137

97. Which group of vertebrates have characteristic features the presence of feathers and most of them can fly ?

- (1) Mammals (2) Fishes
(3) Reptiles (4) Birds

BAD258

98. Which class name refers to their creeping or crawling mode of locomotion (Latin, repere or reptum, to creep or crawl)?

- (1) Aves (2) Mammalia
(3) Amphibia (4) Reptilia

BAD259

EXERCISE-I (Conceptual Questions)

ANSWER KEY

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer	1	2	3	4	2	3	4	2	1	4	4	3	4	2	3
Question	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Answer	1	2	2	2	1	3	3	1	3	4	3	3	2	1	1
Question	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Answer	3	2	3	2	4	3	3	3	3	2	4	4	1	2	1
Question	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Answer	4	4	2	4	1	2	4	1	2	2	3	1	4	3	4
Question	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Answer	3	1	2	4	2	2	4	1	2	4	1	2	3	4	1
Question	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Answer	4	1	3	2	1	2	4	3	3	4	1	1	4	1	1
Question	91	92	93	94	95	96	97	98							
Answer	1	1	4	3	1	4	4	4							

Exercise - II (Previous Year Questions)

AIPMT/NEET

AIPMT 2014

1. Which one of the following living organisms completely *lacks* a cell wall?

- (1) Cyanobacteria
(2) Sea – fan (*Gorgonia*)
(3) *Saccharomyces*
(4) Blue–green algae

BAD175

2. Select the Taxon mentioned that represents both marine and fresh water species :

- (1) Echinoderms (2) Ctenophora
(3) Cephalochordata (4) Cnidaria

BAD176

3. *Planaria* possess high capacity of :

- (1) Metamorphosis
(2) Regeneration
(3) Alternation of generation
(4) Bioluminescence

BAD177

4. A marine cartilaginous fish that can produce electric current is :

- (1) *Pristis* (2) *Torpedo*
(3) *Trygon* (4) *Scoliodon*

BAD178

AIPMT 2015

5. Which of the following animals is **not** viviparous?

- (1) Elephant (2) Platypus
(3) Whale (4) Flying fox (Bat)

BAD179

6. Which of the following represents the correct combination without any exception?

	Characteristics	Class
(1)	Mouth ventral, gills without operculum; skin with placoid scales; persistent notochord	Chondrichthyes
(2)	Sucking and circular mouth; jaws absent, integument without scales; paired appendages	Cyclostomata
(3)	Body covered with feathers; skin moist and glandular; fore-limbs form wings; lungs with air sacs	Aves
(4)	Mammary gland; hair on body; pinnae; two pairs of Limbs	Mammalia

BAD180

Re-AIPMT 2015

7. Metagenesis refers to :

- (1) Presence of a segmented body and parthenogenetic mode of reproduction
(2) Presence of different morphic forms
(3) Alternation of generation between asexual and sexual phases of an organism
(4) Occurrence of a drastic change in form during post-embryonic development

BAD183

8. Which one of the following animals has two separate circulatory pathways ?

- (1) Shark (2) Frog
(3) Lizard (4) Whale

BAD184

9. Body having meshwork of cells, internal cavities lined with food filtering flagellated cells and indirect development are the characteristics of phylum :

(1) Protozoa (2) Coelenterata
(3) Porifera (4) Mollusca

BAD185

10. A jawless fish, which lays eggs in fresh water and whose ammocoetes larvae after metamorphosis return to the ocean is :

(1) *Petromyzon*
(2) *Eptatretus*
(3) *Myxine*
(4) *Neomyxine*

BAD186

NEET-I 2016

11. Which of the following characteristic features always holds true for the corresponding group of animals?

(1)	Cartilaginous endoskeleton	Chondrichthyes
(2)	Viviparous	Mammalia
(3)	Possess a mouth with an upper and a lower jaw	Chordata
(4)	3 - chambered heart with one incompletely divided ventricle	Reptilia

BAD187

12. Which one of the following characteristics is **not** shared by birds and mammals ?

(1) Ossified endoskeleton
(2) Breathing using lungs
(3) Viviparity
(4) Warm blooded nature

BAD188

NEET-II 2016

13. Choose the **correct** statement.
(1) All reptiles have a three-chambered heart.
(2) All pisces have gills covered by an operculum.
(3) All mammals are viviparous.
(4) All cyclostomes do not possess jaws and paired fins.

BAD189

NEET (UG) 2017

14. An important characteristic that Hemichordates share with Chordates is :
(1) Ventral tubular nerve cord
(2) Pharynx with gill slits
(3) Pharynx without gill slits
(4) Absence of notochord

BAD190

15. Which among these is the correct combination of aquatic mammals ?
(1) Dolphins, Seals, *Trygon*
(2) Whales, Dolphins, Seals
(3) *Trygon*, Whales, Seals
(4) Seals, Dolphins, Sharks

BAD191

16. In case of poriferans, the spongocoel is lined with flagellated cells called:
(1) oscula
(2) choanocytes
(3) mesenchymal cells
(4) ostia

BAD192

NEET (UG) 2018

17. Which of the following animals does **not** undergo metamorphosis ?
(1) Earthworm (2) Tunicate
(3) Moth (4) Starfish

BAD193

18. Identify the vertebrate group of animals characterized by crop and gizzard in its digestive system.

(1) Amphibia (2) Reptilia
(3) Aves (4) Osteichthyes

BAD194

19. Which one of these animals is **not** a homeotherm?

(1) *Macropus* (2) *Chelone*
(3) *Camelus* (4) *Psittacula*

BAD195

NEET (UG) 2019

20. Match the following organisms with their respective characteristics :

(a) *Pila* (i) Flame cells
(b) *Bombyx* (ii) Comb plates
(c) *Pleurobrachia* (iii) Radula
(d) *Taenia* (iv) Malpighian tubules

Select the **correct** option from the following:

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

BAD197

21. 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.

(1) Annelida, Arthropoda and Chordata
(2) Annelida, Arthropoda and Mollusca
(3) Arthropoda, Mollusca and Chordata
(4) Annelida, Mollusca and Chordata

BAD198

NEET (UG) 2019 (Odisha)

22. Match the following genera with their respective phylum:

(a) *Ophiura* (i) Mollusca
(b) *Physalia* (ii) Platyhelminthes
(c) *Pinctada* (iii) Echinodermata
(d) *Planaria* (iv) Coelenterata

Select the correct option:

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

BAD199

23. Which of the following animals are true coelomates with bilateral symmetry?

(1) Adult Echinoderms
(2) Aschelminthes
(3) Platyhelminthes
(4) Annelids

BAD200

NEET (UG) - 2020

24. Match the following columns and select the **correct** option.

Column -I	Column -II
(a) 6 -15 pairs of gill slits	(i) <i>Trygon</i>
(b) Heterocercal caudal fin	(ii) Cyclostomes
(c) Air Bladder	(iii) Chondrichthyes
(d) Poison sting	(iv) Osteichthyes

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

BAD201

25. Which of the following statements are true for the phylum-Chordata ?

- (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.

- (1) (b) and (c) (2) (d) and (c)
- (3) (c) and (a) (4) (a) and (b)

BAD202

26. Match the following columns and select the correct option.

Column-I	Column-II
(a) Gregarious, polyphagous pest	(i) <i>Asterias</i>
(b) Adult with radial symmetry and larva with bilateral symmetry	(ii) Scorpion
(c) Book lungs	(iii) <i>Ctenoplana</i>
(d) Bioluminescence	(iv) <i>Locusta</i>
(1) a–(ii), b–(i), c–(iii), d–(iv)	
(2) a–(i), b–(iii), c–(ii), d–(iv)	
(3) a–(iv), b–(i), c–(ii), d–(iii)	
(4) a–(iii), b–(ii), c–(i), d–(iv)	

BAD203

27. Bilaterally symmetrical and acoelomate animals are exemplified by:

- (1) Annelida
- (2) Ctenophora
- (3) Platyhelminthes
- (4) Aschelminthes

BAD204

NEET (UG)-2020 (COVID-19)

28. Which of the following options does correctly represent the characteristic features of phylum Annelida ?

- (1) Triploblastic, unsegmented body and bilaterally symmetrical.
- (2) Triploblastic, segmented body and bilaterally symmetrical.
- (3) Triploblastic, flattened body and acoelomate condition.
- (4) Diploblastic, mostly marine and radially symmetrical.

BAD205

29. Match the following group of organisms with their respective distinctive characteristics and select the correct option

Organisms	Characteristics
(a) Platyhelminthes	(i) Cylindrical body with no segmentation
(b) Echinoderms	(ii) Warm blooded animals with direct development
(c) Hemichordates	(iii) Bilateral symmetry with incomplete digestive system
(d) Aves	(iv) Radial symmetry with Indirect development

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

BAD206

30. All vertebrates are chordates but all chordates are not vertebrates, why ?

- (1) Notochord is replaced by vertebral column in adult of some chordates.
- (2) Ventral hollow nerve cord remains throughout life in some chordates.
- (3) All chordates possess vertebral column.
- (4) All chordates possess notochord throughout their life.

BAD207

31. Match the following columns and select the correct option :

Column-I	Column-II
(a) <i>Aptenodytes</i>	(i) Flying fox
(b) <i>Pteropus</i>	(ii) Angel fish
(c) <i>Pterophyllum</i>	(iii) Lamprey
(d) <i>Petromyzon</i>	(iv) Penguin
(1) (a)-(iii), (b)-(iv), (c)-(ii), (d)-(i)	
(2) (a)-(iii), (b)-(iv), (c)-(i), (d)-(ii)	
(3) (a)-(iv), (b)-(i), (c)-(ii), (d)-(iii)	
(4) (a)-(ii), (b)-(i), (c)-(iv), (d)-(iii)	

BAD208

NEET (UG) - 2021

32. Read the following statements.

- (a) Metagenesis is observed in Helminths.
- (b) Echinoderms are triploblastic and coelomate animals.
- (c) Round worms have organ-system level of body organization.
- (d) Comb plates present in ctenophores help in digestion.
- (e) Water vascular system is characteristic of echinoderms.

Choose the **correct** answer from the options given below.

- (1) (c), (d) and (e) are correct
- (2) (a), (b) and (c) are correct
- (3) (a), (d) and (e) are correct
- (4) (b), (c) and (e) are correct

BAD209

33. Match List - I with List - II.

List-I	List-II
(a) Metamerism	(i) Coelenterata
(b) Canal system	(ii) Ctenophora
(c) Comb plates	(iii) Annelida
(d) Cnidoblasts	(iv) Porifera

Choose the **correct** answer from the options given below.

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

BAD210

34. Match the following:

List-I	List-II
(a) <i>Physalia</i>	(i) Pearl oyster
(b) <i>Limulus</i>	(ii) Portuguese Man of War
(c) <i>Ancylostoma</i>	(iii) Living fossil
(d) <i>Pinctada</i>	(iv) Hookworm

Choose the **correct** answer from the options given below.

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

BAD211

35. Which one of the following organisms bears hollow and pneumatic long bones?

(1) *Neophron* (2) *Hemidactylus*
(3) *Macropus* (4) *Ornithorhynchus*

BAD212

NEET (UG) - 2022

36. Nitrogenous waste is excreted in the form of pellet or paste by :

(1) *Salamandra* (2) *Hippocampus*
(3) *Pavo* (4) *Ornithorhynchus*

BAD213

37. **Assertion (A)** : All vertebrates are chordates but all chordates are not vertebrates.

Reason (R) : Notochord is replaced by vertebral column in the adult vertebrates.

In the light of the above statements, choose the **most appropriate** answer from the options given below :

- (1) Both **(A)** and **(R)** are correct but **(R)** is **not** the correct explanation of **(A)**
(2) **(A)** is correct but **(R)** is not correct
(3) **(A)** is not correct but **(R)** is correct
(4) Both **(A)** and **(R)** are correct and **(R)** is the correct explanation of **(A)**

BAD214

38. In which of the following animals, digestive tract has additional chambers like crop and gizzard ?

(1) *Bufo*, *Balaenoptera*, *Bangarus*
(2) *Catla*, *Columba*, *Crocodilus*
(3) *Pavo*, *Psittacula*, *Corvus*
(4) *Corvus*, *Columba*, *Chameleon*

BAD215

Re-NEET (UG) - 2022

39. Select the **incorrect** statements with respect to cyclostomes:

(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.

(1) (a) and (b) only (2) (b) and (c) only
(3) (b) and (d) only (4) (a) and (d) only

BAD216

40. Which of the following animals has three chambered heart?

(1) *Scoliodon* (2) *Hippocampus*
(3) *Chelone* (4) *Pteropus*

BAD217

NEET (UG) - 2023

41. Radial symmetry is NOT found in adults of phylum _____.

(1) Hemichordata (2) Coelenterata
(3) Echinodermata (4) Ctenophora

BAD268

42. Select the **correct** statements with reference to chordates.

A. Presence of 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:

(1) B and C only (2) B, D and E only
(3) C, D and E only (4) A, C and D only

BAD269

43. The unique mammalian characteristics are :
- (1) hairs, pinna and mammary glands
 - (2) hairs, pinna and indirect development
 - (3) pinna, monocondylic skull and mammary glands
 - (4) hairs, tympanic membrane and mammary glands

BAD270

NEET (UG) (Manipur) - 2023

44. Match List-I with List-II.

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

Choose the **correct** answer from the options given below :

- (1) (A)-(IV), (B)-(II), (C)-(I), (D)-(III)
- (2) (A)-(I), (B)-(III), (C)-(II), (D)-(IV)
- (3) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)
- (4) (A)-(II), (B)-(I), (C)-(III), (D)-(IV)

BAD271

45. Select the **correct** statements :

- (A) Platyhelminthes are triploblastic pseudocoelomate and bilaterally symmetrical organisms.
- (B) Ctenophores reproduce only sexually and fertilization is external.
- (C) In tapeworm, fertilization is internal but sexes are not separate.
- (D) Ctenophores are exclusively marine, diploblastic and bioluminescent organisms.

- (E) In sponges, fertilization is external and development is direct.

Choose the **correct** answer from the options given below :

- (1) (A), (C) and (D) only
- (2) (B), (C) and (D) only
- (3) (A) and (E) only
- (4) (B) and (D) only

BAD272

NEET (UG) 2024

46. Match List I with List II.

List I		List II	
A.	<i>Pleurobrachia</i>	I.	Mollusca
B.	Radula	II.	Ctenophora
C.	Stomochord	III.	Osteichthyes
D.	Air bladder	IV.	Hemichordata

Choose the **correct** answer from the options given below :-

- (1) A-IV, B-II, C-III, D-I
- (2) A-II, B-I, C-IV, D-III
- (3) A-II, B-IV, C-I, D-III
- (4) A-IV, B-III, C-II, D-I

BAD275

47. Consider the following statements :-

- A. Annelids are true coelomates
 - B. Poriferans are pseudocoelomates
 - C. Aschelminthes are acoelomates
 - D. Platyhelminthes are pseudocoelomates
- Choose the **correct** answer from the options given below :-

- (1) B only
- (2) A only
- (3) C only
- (4) D only

BAD276

48. Match List I with List II.

List-I		List-II	
A.	<i>Pterophyllum</i>	I.	Hag fish
B.	<i>Myxine</i>	II.	Saw fish
C.	<i>Pristis</i>	III.	Angel fish
D.	<i>Exocoetus</i>	IV.	Flying fish

Choose the **correct** answer from the options given below :

- (1) A-II, B-I, C-III, D-IV
- (2) A-III, B-I, C-II, D-IV
- (3) A-IV, B-I, C-II, D-III
- (4) A-III, B-II, C-I, D-IV

BAD277

49. The following are the statements about non-chordates :-

- A. Pharynx is perforated by gill slits.
- B. Notochord is absent.
- C. Central nervous system is dorsal.
- D. Heart is dorsal if present.
- E. Post anal tail is absent.

- (1) A & C only
- (2) A, B & D only
- (3) B, D & E only
- (4) B, C & D only

BAD278

RE-NEET (UG) 2024

50. Match List-I with List-II.

List-I	List-II
A. Chondrichthyes	I. <i>Clarias</i>
B. Cyclostomata	II. <i>Carcharodon</i>
C. Osteichthyes	III. <i>Myxine</i>
D. Amphibia	IV. <i>Ichthyophis</i>

Choose the **correct** answer from the options given below :-

- (1) A-II, B-IV, C-I, D-III
- (2) A-I, B-III, C-II, D-IV
- (3) A-II, B-III, C-I, D-IV
- (4) A-I, B-II, C-III, D-IV

BAD279

51. Open Circulatory system is present in:

- (1) *Palaemon*, *Nereis*, *Balanoglossus*
- (2) *Hirudinaria*, *Bombyx*, *Salpa*
- (3) *Anopheles*, *Limax*, *Limulus*
- (4) *Pheretima*, *Musca*, *Pila*

BAD280

52. Which of the following pairs is an **incorrect** match ?

- (1) Annelids and arthropods – Bilateral symmetry
- (2) Sponges - Acoelomates
- (3) Coelenterates and Ctenophores – Radial symmetry
- (4) Platyhelminthes – Diploblastic organisation

BAD281

53. One is labelled as **Assertion A** and the other is labelled as **Reason R**.

Assertion (A) : Members of subphylum vertebrate possess notochord during the embryonic period. The notochord is replaced by a cartilaginous or bony vertebral column in the adult.

Reason (R) : Thus all chordates are vertebrates but not all vertebrates are chordates.

In the light of the above statements, choose the **correct** answer from the options given below :-

- (1) **A** is true but **R** is false
- (2) **A** is false but **R** is true
- (3) Both **A** and **R** are true and **R** is the correct explanation of **A**.
- (4) Both **A** and **R** are true but **R** is NOT the correct explanation of **A**.

BAD282

EXERCISE-II (Previous Year Questions)
ANSWER KEY

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer	2	4	2	2	2	1	3	4	3	1	1	3	4	2	2
Question	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Answer	2	1	3	2	2	1	2	4	2	1	3	3	2	1	1
Question	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Answer	3	4	3	3	1	3	4	3	3	3	1	1	1	4	2
Question	46	47	48	49	50	51	52	53							
Answer	2	2	2	3	3	3	4	1							

Exercise - III

Master Your Understanding

1. Which one of the following is a radially symmetrical, blind sac body plan and diploblastic animal?

(1) *Spongilla* (2) *Euspongia*
(3) *Asterias* (4) *Physalia*

BAD218

2. Which one is not a platyhelminthes?

(1) Tapeworm (2) Liver fluke
(3) *Planaria* (4) Hookworm

BAD219

3. Consider the following statements :-

(A) Protochordates are exclusively marine
(B) In cephalochordates, Notochord extends from head to tail region.
(C) In urochordates, Notochord is present only in larval tail.
(D) Cranium and vertebral column are bony in cyclostomates.

Which of the above statement is/are correct?

(1) A alone (2) B, C and D
(3) A, B and C (4) All

BAD220

4. Consider the following characteristic of fishes:

(A) They have four pairs of gills which are covered by an operculum.
(B) They have air bladder which regulates buoyancy
(C) They are mostly viviparous and development is direct
(D) Their body is streamlined and covered with cycloid/ctenoid scales

Which of the above characteristics regarding bony fishes are correct?

(1) A, B and C (2) C and D
(3) A, B and D (4) B alone

BAD221

5. Which of the following animal is radially symmetrical but has a bilaterally symmetrical larva?

(1) *Ascaris* (Round worm)
(2) *Nereis* (Ring worm)
(3) *Pila* (Apple snail)
(4) *Asterias* (Star fish)

BAD222

6. Identified the correct statement from the following with reference to Amphibians :

(A) They have internal fertilisation and development is direct.
(B) Amphibian skin is moist and without scales
(C) Their body is divisible into head and trunk
(D) They have three chambered heart

Select the **correct** answer :

(1) A and D (2) A and B
(3) B, C and D (4) D alone

BAD223

7. Which of the following pairs are correctly matched?

(A) Poikilothermous - Birds and mammals
(B) Agnatha - *Petromyzon* and *Myxine*
(C) Tunicates - *Ascidia*, *Salpa* and *Doliolum*
(D) Cartilaginous fishes - *Betta* and *Labeo*
(1) A and B (2) A, B and C
(3) B and C (4) A, B and D

BAD224

8. Water vascular system is found in :
 (1) Porifera (2) Echinodermata
 (3) Mollusca (4) Elasmobranch

BAD225

9. Match the column :-
 (a) *Dentalium* (i) Brittle star
 (b) *Ophiura* (ii) Cuttle fish
 (c) *Antedon* (iii) Sea Urchin
 (d) *Echinus* (iv) Tusk shell
 (e) *Sepia* (v) Sea lily
 (1) a-(iv), b-(i), c-(iv), d-(ii), e-(iii)
 (2) a-(iv), b-(i), c-(v), d-(iii), e-(ii)
 (3) a-(i), b-(iv), c-(v), d-(iii), e-(ii)
 (4) a-(iv), b-(i), c-(iii), d-(v), e-(ii)

BAD226

10. True coelom and metameric segmentation in the body is first observed in which of the following phylum?
 (1) Platyhelminthes (2) Aschelminthes
 (3) Annelida (4) Arthropoda

BAD227

11. Read the following statements (a to e) carefully :
 (a) Triploplastic
 (b) Bilateral symmetric
 (c) Organ system organisation
 (d) Pseudocoelomate
 (e) Metameric segmentation
 Which of the above statement(s) is/are correct for phylum Aschelminthes
 (1) a and b only
 (2) a, b, c and e
 (3) a, b, c and d
 (4) a, b, c, d and e

BAD228

12. Which of the following coelenterate exist in both forms polyp and medusa and exhibit metagenesis?

- (1) *Hydra* (2) *Adamsia*
 (3) *Obelia* (4) *Gorgonia*

BAD229

13. Mark the incorrectly matched pair
 (1) *Petromyzon* – Body devoid of scales and paired fins
 (2) *Scoliodon* – Operculum present but air bladder is absent
 (3) *Exocoetus* – Heart two chambered with sinus venosus
 (4) *Rana* – Cold blooded with 10 pairs of cranial nerves and mesonephric kidneys

BAD230

14. Match list 'A' and List 'B' correctly and find your answer from the code given below :

List-A	List-B
(Animal)	(Common name)
(i) <i>Physalia</i>	(A) Brain coral
(ii) <i>Pennatula</i>	(B) Sea fan
(iii) <i>Gorgonia</i>	(C) Sea pen
(iv) <i>Meandrina</i>	(D) Portuguese man of war

Code :

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

BAD231

15. Which of the following is gregarious pest?
 (1) Bed bug (2) Rat
 (3) Cockroach (4) *Locusta*

BAD232

16. Pick the odd pair out :

- (1) Cellular level : Porifera
- (2) Tissue level : Aschelminthes
- (3) Organ level : Platyhelminthes
- (4) Organ system level : Annelida

BAD233

17. Select the group of organisms given below those have diploblastic members only :

- (1) *Ctenoplane*, *Taenia*, *Fasciola*
- (2) *Aurelia*, *Physalia*, *Meandrina*
- (3) *Wuchereria*, *Culex*, *Limulus*
- (4) *Aedes*, *Ascaris*, *Hydra*

BAD234

18. Fresh water sponge is :

- (1) *Spongilla* (2) *Scypha*
- (3) *Euspongia* (4) *Leucosolenia*

BAD235

19. The symmetry found in an animal which can be divided into indential left and right halves in only one plane is:

- (1) Spherical (2) Bilateral
- (3) Radial (4) Biradial

BAD236

20. Select the pseudocoelomates from the list of organisms given below :

- (1) *Ascaris*, *Fasciola*, *Taenia*
- (2) *Culex*, *Locusta*, *Limulus*
- (3) *Wuchereria*, *Ascaris*, *Ancylostoma*
- (4) *Nereis*, *Hirudinaria*, *Wuchereria*

BAD237

21. Which of the following pairs of animals comprise 'Comb jellies' ?

- (1) *Balanoglossus* and *Saccoglossus*
- (2) *Pleurobranchia* and *Ctenoplane*
- (3) Sea anemone and sea pen
- (4) Sea lily and brittle star

BAD238

22. Which one of the following pairs of animals comprise 'Cartilaginous fishes'?

- (1) *Labeo* and *Catla*
- (2) *Pterophyllum* and *Scoliodon*
- (3) *Pristis* and *Carcharodon*
- (4) *Petromyzon* and *Myxine*

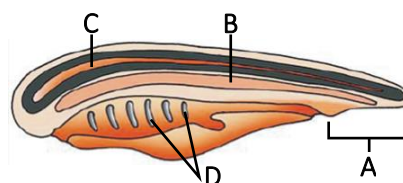
BAD239

23. Which of the following fishes is also known as "Great white shark"?

- (1) *Pristis* (2) *Trygon*
- (3) *Clarias* (4) *Carcharodon*

BAD240

24. A schematic representation of a chordate's embryo is shown in the above figure.



The structures marked **A**, **B**, **C** and **D** are respectively :

- (1) Notochord, Nerve cord, Intestine and gill slits
- (2) Post anal part, Gill slits, Nerve cord and Notochord
- (3) Post anal part, nerve cord, Notochord and Gill
- (4) Post anal part, Notochord, Nerve cord and Gill slits.

BAD241

25. In which one of the following protochordates notochord present only in the tail of larva ?

- (1) *Ascidia* (2) *Balanoglossus*
- (3) *Myxine* (4) *Branchiostoma*

BAD242

26. In which of the following group notochord present in whole life?

- (1) Hemichordata (2) Urochordata
(3) Cephalochordata (4) Vertebrata

BAD243

27. Match the column-I with the column-II and find out the correct answer :

Column-I	Column-II
(A) Spongocoel	(i) Arthropoda
(B) Dorso-ventrally flattened body	(ii) Cnidaria
(C) Coelenteron cavity	(iii) Porifera
(D) Chitinous exoskeleton	(iv) Platyhelminthes

(1) A-iii, B-iv, C-i, D-ii

(2) A-iv, B-iii, C-ii, D-i

(3) A-iii, B-iv, C-ii, D-i

(4) A-ii, B-iv, C-iii, D-i

BAD244

28. Which of the following is a matching pair ?

- (1) *Ophiura* – Sea lily
(2) *Octopus* – Cuttle fish
(3) *Torpedo* – Electric ray
(4) *Aptenodytes* – Ostrich

BAD245

29. Which one is not the character of Osteichthyes?

- (1) Terminal mouth
(2) Gills with operculum
(3) Body covered by placoid scales
(4) Air bladder regulate buoyancy.

BAD246

30. Which one of the following pairs is not correctly matched?

- (1) *Chaetopleura* - Chiton
(2) *Ascaris* - Round worm
(3) *Wuchereria* - Filaria worm
(4) *Enterobius* - Hook worm

BAD247

31. The greatest evolutionary change that enabled the land vertebrates to be completely free from water, was the development of :

- (1) four appendages
(2) lungs
(3) cleidoic eggs
(4) four chambered heart

BAD248

32. A mammal which completely lives in water is:

- (1) Bear (2) Camel
(3) Whale (4) Rhinoceros

BAD249

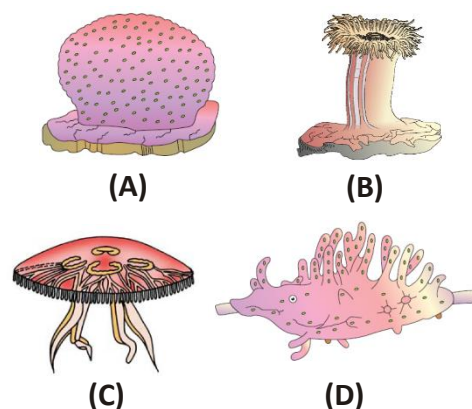
33. How many in the given examples of animals are Coelentrates?

Physalia, Obelia, Planaria, Pennatula, Gorgonia, Pleurobrachia, Meandrina and Nereis

- (1) Three (2) Four
(3) Five (4) Six

BAD251

34. Identify the following four animals (A, B, C and D) given below. Which one of these is not correctly identified in the option given along with its correct taxonomic group and their common name ?



Options :-

	Fig.	Name of animal	Taxonomic group	Common Name
(1)	B	<i>Adamsia</i>	Ctenophora	Star coral
(2)	D	<i>Spongilla</i>	Porifera	Fresh water sponge
(3)	C	<i>Aurelia</i>	Coelenterata	Jelly fish
(4)	A	<i>Euspongia</i>	Porifera	Bath sponge

BAD252

35. How many organism are related with Echinodermata phylum?

Star fish, Sea-urchin, Sea-lily, Sea-mouse, Sea-hare, Sea-cucumber, Brittle star, Sea-squirt, Sea-fan, Sea-pen

(1) 4 (2) 5 (3) 6 (4) 7

BAD253

36. Which of the following shows the sexual dimorphism?

(1) *Hydra* & *Ascaris*
 (2) *Hydra* & *Macaca*
 (3) *Ascaris* & *Pheretima*
 (4) *Ascaris* & *Macaca*

BAD255

37. Which one of the following features is common in - silverfish, scorpion, dragonfly and prawn ?

(1) Three pairs of legs and segmented body
 (2) Chitinous cuticle and two pairs of antennae
 (3) Jointed appendages and chitinous exoskeleton
 (4) Cephalothorax involves

BAD256

38. In which animal nerve cell is present but brain is absent?

(1) Sponge (2) Earthworm
 (3) Cockroach (4) *Hydra*

BAD257

39. Which one of the following is not a living fossil?

(1) *Peripatus* (2) King crab
 (3) *Sphenodon* (4) *Archaeopteryx*

BAD260

40. Body is divisible into head and trunk in :

(1) Lizard (2) Frog
 (3) Peacock (4) Platypus

BAD261

41. The evidence for the origin of birds from reptiles is the presence in them of :

(1) feathers (2) scales
 (3) claws (4) hairs

BAD262

42. In which one of the following groups all animals are hermaphrodite?

(1) *Hydra*, *Ascaris*, *Pheretima*
 (2) *Hydra*, *Homo sapiens*, Leech
 (3) Tapeworm, Toad, Starfish
 (4) *Hydra*, Leech, Tapeworm

BAD263

43. Given below are two statements:

Statement-I : The most distinct feature of echinoderms is the presence of water canal system.

Statement-II : Echinodermata exhibits radial or bilateral symmetry depending on the stage.

In the light of the above statements, choose the most appropriate answer from the options given below:

(1) Both Statement-I and II are incorrect.
 (2) Statement-I is correct but statement-II is incorrect.
 (3) Statement-I is incorrect and Statement-II is correct.
 (4) Both Statement-I and Statement-II are correct.

BAD264

44. Given below are two statements:

Statement-I : In cephalochordate notochord is persistent throughout their life.

Statement-II : *Branchiostoma* is an example of cephalochordata

In the light of the above statements, choose the most appropriate answer from the options given below:

- (1) Both Statement-I and II are incorrect.
- (2) Statement-I is correct but statement-II is incorrect.
- (3) Statement-I is incorrect and Statement-II is correct.
- (4) Both Statement-I and Statement-II are correct.

BAD265

45. Given below are two statements:

Statement-I : All chordates are vertebrates but all vertebrates are not chordates.

Statement-II : Sub phylum urochordata and cephalochordate are often referred as protochordata.

In the light of the above statements, choose the most appropriate answer from the options given below:

- (1) Both Statement-I and II are incorrect.
- (2) Statement-I is correct but statement-II is incorrect.
- (3) Statement-I is incorrect and Statement-II is correct.
- (4) Both Statement-I and Statement-II are correct.

BAD266

46. Given below are two statements; one is labelled as Assertion (A) and the other is labelled as Reason(R).

Assertion (A) : Water vascular system helps in locomotion, capture and transport of food and respiration in porifera.

Reason (R) : The presence of water vascular system is most unique feature of porifera.

In the light of the above statements, choose the correct answer from the options given below :

- (1) Both (A) & (R) are correct but (R) is the not correct explanation of (A).
- (2) (A) and (R) both are not correct.
- (3) (A) is not correct but (R) is correct.
- (4) Both (A) & (R) are correct and (R) is the correct explanation of (A).

BAD267

47. Match the following:

- | | |
|-----------------|--------------------------------------|
| (a) Operculum | (i) Ctenophora |
| (b) Parapodia | (ii) Mollusca |
| (c) Scales | (iii) Porifera |
| (d) Comb plates | (iv) Reptilia |
| (e) Radula | (v) Annelida |
| (f) Hairs | (vi) Cyclostomata and Chondrichthyes |
| (g) Choanocytes | (vii) Mammalia |
| (h) Gill slits | (viii) Osteichthyes |

- (1) a-vi, b-v, c-vii, d-i, e-ii, f-viii, g-iii, h-iv
- (2) a-viii, b-v, c-iv, d-i, e-ii, f-vii, g-iii, h-vi
- (3) a-viii, b-vii, c-vi, d-v, e-ii, f-iv, g-ii, h-i
- (4) a-i, b-vi, c-v, d-viii, e-ii, f-iii, g-iv, h-vii

BAD273

- 48.** Find incorrectly matched parasitic animal with its phylum.
 (1) *Fasciola hepatica* – Platyhelminthes
 (2) *Ascaris lumbricoids* – Aschelminthes
 (3) *Taenia solium* – Flatworms
 (4) *Wuchereria* – Platyhelminthes
BAD274
- 49.** Which one of the following is a matching set of a phylum and its three examples ?
 (1) Porifera – *Spongilla*, *Euplectella*, *Pennatula*
 (2) Cnidaria – *Bonellia*, *Physalia*, *Aurelia*
 (3) Platyhelminthes – *Planaria*, *Schistosoma*, *Enterobius*
 (4) Mollusca – *Loligo*, *Teredo*, *Octopus*
BAD139
- 50.** Metameric segmentation is the characteristic of :
 (1) Mollusca and Chordata
 (2) Platyhelminthes and Arthropoda
 (3) Echinodermata and Annelida
 (4) Annelida and Arthropoda
BAD140
- 51.** Two common characters found in Centipede, Cockroach and Crab are :
 (1) Book lungs and antennae
 (2) Compound eyes and anal cerci
 (3) Jointed legs and chitinous exoskeleton
 (4) Green gland and tracheae
BAD141
- 52.** Biradial symmetry and lack of cnidoblasts are the characteristic of :
 (1) *Hydra* and *Starfish*
 (2) *Starfish* and *Sea Anemone*
 (3) *Ctenoplanea* and *Beroe*
 (4) *Aurelia* and *Paramoecium*
BAD142
- 53.** In which one of the following sets of animals all the four give birth to young ones ?
 (1) Kangaroo, Hedgehog, Dolphin, Loris
 (2) Lion, Bat, Whale, Ostrich
 (3) Platypus, Penguin, Bat, *Hippopotamus*
 (4) Shrew, Bat, Cat, Kiwi
BAD144
- 54.** Which one of the following is a matching pair of a body feature and the animal possessing it?
 (1) Ventral heart – Scorpion
 (2) Post-anal tail – *Octopus*
 (3) Ventral central nervous system – Leech
 (4) Pharyngeal gill slits absent in embryo – *Chamaeleon*
BAD145
- 55.** What is true about *Nereis*, Scorpion, Cockroach and Silver fish ?
 (1) They all belong to the same phylum
 (2) They all have paired jointed appendages
 (3) They all possess dorsal heart
 (4) None of them is aquatic
BAD146
- 56.** Which one of the following pairs is mismatched?
 (1) *Bombyx mori* – Silk
 (2) *Pila globosa* – Pearl
 (3) *Apis indica* – Honey
 (4) *Kenia lacca* – Lac
BAD147
- 57.** Which of the following pairs are correctly matched ?
- | Animals | Morphological features |
|-------------------|------------------------|
| (A) Crocodile | 4-chambered heart |
| (B) Sea Urchin | Parapodia |
| (C) <i>Obelia</i> | Metagenesis |
| (D) Lemur | Thecodont |
| (1) Only A and B | (2) A, C and D |
| (3) B, C and D | (4) Only A and D |
- BAD148**

58. What is common between parrot, platypus and kangaroo ?

- (1) Ovoparity
- (2) Homoiothermy
- (3) Toothless jaws
- (4) Functional post-anal tail

BAD149

59. Which one of the following is not a characteristic of phylum Annelida?

- (1) Closed circulatory system
- (2) Segmentation
- (3) Pseudocoelom
- (4) Ventral nerve cord

BAD150

60. Which one of the following phyla is correctly matched with its two general characteristics?

- (1) Arthropoda : Body divided into head, thorax and abdomen and respiration by tracheae
- (2) Chordata : Notochord at some stage and separate anal and urinary openings to the outside
- (3) Echinodermata : Pentamerous radial symmetry and mostly internal fertilisation
- (4) Mollusca : Normally oviparous and development through a trochophore or veliger larva

BAD151

61. *Ascaris* is characterized by :

- (1) absence of true coelom but presence of metamerism
- (2) presence of neither true coelom nor metamerism
- (3) presence of true coelom but absence of metamerism
- (4) presence of true coelom and metamerism

BAD152

62. Which one of the following groups of the three animals each is correctly matched with their one characteristic morphological feature?

Animals	Morphological feature
(1) Liver fluke, Sea anemone, Sea cucumber	– Bilateral symmetry
(2) Centipede, Prawn, Sea urchin	– Joined appendages
(3) Scorpion, Spider, – Cockroach	Ventral solid central nervous system
(4) Cockroach, Locust, <i>Taenia</i>	– Metameric segmentation

BAD153

63. Which one of the following groups of animals is bilaterally symmetrical and triploblastic?

- (1) Sponges
- (2) Coelenterates (Cnidarians)
- (3) Aschelminthes (round worms)
- (4) Ctenophores

BAD154

64. *Peripatus* is a connecting link between :

- (1) Coelenterata and Porifera
- (2) Ctenophora and Platyhelminthis
- (3) Mollusca and Echinodermata
- (4) Annelida and Arthropoda

BAD155

65. One example of animals having a single opening to the outside that serves both as mouth as well as anus is :

- (1) *Fasciola*
- (2) *Octopus*
- (3) *Asterias*
- (4) *Herdmania*

BAD157

66. Which one of the following statement about all the four of *Spongilla*, Leech, Dolphin and Penguin is **correct** ?

- (1) All are bilaterally symmetrical
- (2) Penguin is homoiothermic while the remaining three are poikilothermic
- (3) Leech is a fresh water form while all others are marine
- (4) *Spongilla* has special collared cells called choanocytes, not found in the remaining three.

BAD158

67. Which one of the following animals are triploblastic?

- (1) Corals
- (2) Flat worms
- (3) Sponges
- (4) Ctenophores

BAD159

68. Which one of the following statement about certain given animals is correct ?

- (1) Flatworms (Platyhelminthes) are coelomates
- (2) Roundworms (Aschelminthes) are pseudocoelomates
- (3) Molluscs are acoelomates
- (4) Insects are pseudocoelomates

BAD160

69. Crocodile and Penguin are similar to Whale and Dogfish in which one of the following features ?

- (1) Lay eggs and guard them till they hatch
- (2) Possess bony skeleton
- (3) Have gill slits at some stage
- (4) Possess a solid single stranded central nervous system

BAD161

70. Which one of the following groups of animals is correctly matched with its one characteristic feature without even a single exception ?

- (1) Reptilia : possess 3-chambered heart with one incompletely divided ventricle
- (2) Chordata : possess a mouth provided with an upper and a lower jaw
- (3) Chondrichthyes : possess cartilaginous endoskeleton
- (4) Mammalia : give birth to young ones

BAD162

71. Which one of the following animals is correctly matched with its particular named taxonomic category ?

- (1) Tiger – *tigris*, the species
- (2) Cuttlefish – Mollusca, a class
- (3) Humans – Primata, the family
- (4) Housefly – *Musca*, an order

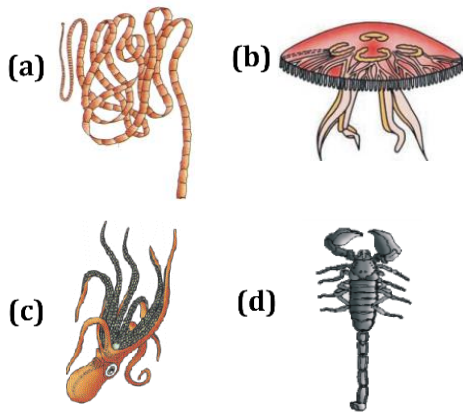
BAD163

72. In which one of the following the genus name, its two character and its class/phylum are correctly matched?

Genus name	Two characters	Class/Phylum
(1) <i>Ascaris</i>	(a) Body segmented (b) Males and females distinct	Annelida
(2) <i>Salamandra</i>	(a) A tympanum represents ear (b) Fertilization is external	Amphibia
(3) <i>Pteropus</i>	(a) Skin possesses hair (b) Oviparous	Mammalia
(4) <i>Aurelia</i>	(a) Cnidoblasts (b) Organ level of organization	Coelenterata

BAD164

73. The figure shows four animals (a), (b), (c) and (d). Select the correct answer with respect to a common characteristics of two of these animals.



- (1) (c) and (d) have a true coelom
- (2) (a) and (d) respire mainly through body wall
- (3) (b) and (c) show radial symmetry
- (4) (a) and (b) have cnidoblasts for self-defence.

BAD165

74. In which one of the following, the genus name, its two characters and its phylum are **not correctly** matched, whereas the remaining three are correct ?

	Genus name	Two characters	Phylum
(1)	<i>Sycon</i>	(a) Pore bearing (b) Canal system	Porifera
(2)	<i>Periplaneta</i>	(a) Jointed appendages (b) Chitinous exoskeleton	Arthropoda
(3)	<i>Pila</i>	(a) Body segmented (b) Mouth with Radula	Mollusca
(4)	<i>Asterias</i>	(a) Spiny skinned (b) Water vascular system	Echino-dermata

BAD166

75. Which one of the following categories of animals, is correctly described with no single exception in it?

- (1) All sponges are marine and have collared cells
- (2) All mammals are viviparous and possess diaphragm for breathing
- (3) All reptiles possess scales, have a three chambered heart and are cold blooded (poikilothermal)
- (4) All bony fishes have four pairs of gills and an operculum on each side

BAD168

76. Which one of the following pairs of animals are similar to each other pertaining to the feature stated against them?

- (1) *Ascaris* and *Ancylostoma* – Metameric segmentation
- (2) Sea horse and Flying fish – Cold blooded (poikilothermal)
- (3) *Pteropus* and *Ornithorhynchus* – Viviparity
- (4) Garden lizard and Crocodile – Three chambered heart

BAD169

77. One of the representatives of Phylum Arthropoda is :

- (1) flying fish
- (2) cuttle fish
- (3) silver fish
- (4) puffer fish

BAD170

78. Which group of animals belong to the same phylum?

- (1) Sponge, Sea anemone, Starfish
- (2) Malarial parasite, *Amoeba*, Mosquito
- (3) Earthworm, Pinworm, Tapeworm
- (4) Prawn, Scorpion, *Locusta*

BAD171

79. Infection of *Ascaris* usually occurs by :

- (1) mosquito bite
- (2) drinking water containing eggs of *Ascaris*
- (3) eating imperfectly cooked pork.
- (4) Tse-tse fly

BAD172

80. Which of the following are correctly matched with respect to their taxonomic classification?

- (1) Spiny anteater, sea urchin, sea cucumber – Echinodermata
- (2) Flying fish, cuttlefish, silverfish – Pisces
- (3) Centipede, millipede, spider, scorpion – Insecta
- (4) House fly, butterfly, tsetsefly, silverfish – Insecta

BAD173

81. Match the name of the animal (column-I), with one characteristics (column-II), and the phylum/ class (column-III) to which it belongs :

	Column I	Column II	Column III
(1)	<i>Adamsia</i>	radially symmetrical	Porifera
(2)	<i>Petromyzon</i>	ectoparasite	Cyclostomata
(3)	<i>Ichthyophis</i>	terrestrial	Reptilia
(4)	<i>Limulus</i>	Body covered by chitinous exoskeleton	Pisces

BAD174

EXERCISE-III

ANSWER KEY

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer	4	4	3	3	4	3	3	2	2	3	3	3	2	2	4
Question	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Answer	2	2	1	2	3	2	3	4	4	1	3	3	3	3	4
Question	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Answer	3	3	3	1	3	4	3	4	4	2	2	4	3	4	3
Question	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Answer	2	2	4	4	4	3	3	1	3	3	2	2	2	3	4
Question	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Answer	2	3	3	4	1	4	2	2	3	3	1	2	1	3	4
Question	76	77	78	79	80	81									
Answer	2	3	4	2	4	2									

Important Notes