

NEET ANIMAL KINGDOM — VERTEBRATA: CYCLOSTOMATA, CHONDRICHTHYES, OSTEICHTHYES — PYQS

Max. Marks: 76

Questions: 19

Section A (MCQ) — 19 questions

Q.1 A group of researchers procured some fish-like animals and upon investigation the following characters were observed:

Which of the following species of animals did they consider to fit best with these characters ?

- A. Endoskeleton was made of cartilage.
- B. Ectoparasitic; as they were found attached on fish skin with their circular sucking mouth.
- C. Paired fins and scales were absent, but 7 pairs of gill slits were present. [NEET (UG) 2026]

- (1) *Scoliodon* sp. (2) *Exocoetus* sp.
- (3) *Petromyzon* sp. (4) *Branchiostoma* sp.

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Q.2 Select the set of fishes which belong to the class Osteichthyes: [NEET (UG) 2026]

- (1) Saw fish, Fighting fish and Dog fish
- (2) Devil fish, Cuttlefish and Hagfish
- (3) Starfish, Hagfish and Cuttlefish
- (4) Flying fish, Angel fish and Fighting fish

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Q.3 All living members of the class Cyclostomata are : [NEET (UG) 2025]

- (1) Symbiotic (2) Ectoparasite
- (3) Free living (4) Endoparasite

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Q.4 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 : [NEET (UG) 2024]

- (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

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Q.5 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: [RE-NEET (UG) 2024]

- (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

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Q.6 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: [NEET (UG) 2022 (Phase 2)]

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

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Q.7 Match the following columns and select the correct option : [NEET (UG) 2020]

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

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

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Q.8 Which of the following characteristic features always holds true for the corresponding group of animals? [NEET 2016 (Phase 1)]

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

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Q.9 Choose the correct statement [NEET 2016 (Phase 2)]

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

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Q.10 A jawless fish, which lays eggs in fresh water and whose ammocoetes larvae after metamorphosis return to the ocean is [AIPMT 2015]

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

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Q.11 Which of the following represents the correct combination without any exception? (Characteristics – Class) [AIPMT 2015 (Cancelled)]

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

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Q.12 A marine cartilaginous fish that can produce electric current is [AIPMT 2014]

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

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Q.13 Match the name of the animal (**column I**), with one characteristic (**column II**), and the phylum/class (**column III**) to which it belongs. [NEET 2013]

	Column I	Column II	Column III
(1)	Limulus	Body covered by chitinous exoskeleton	Pisces

	Column I	Column II	Column III
(2)	Adamsia	Radially symmetrical	Porifera

	Column I	Column II	Column III
(3)	Petromyzon	Ectoparasite	Cyclostomata

	Column I	Column II	Column III
(4)	Ichthyophis	Terrestrial	Reptilia

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Q.14 Sharks and dogfishes differ from skates and rays because [NEET 2013 (Karnataka)]

- (1) gill slits are ventrally placed
 (2) head and trunk are widened considerably
 (3) distinct demarcation between body and tail
 (4) their pectoral fins distinctly marked off from cylindrical bodies.

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Q.15 Which one of the following pairs of animals are similar to each other pertaining to the feature stated against them? [AIPMT 2012 (Mains)]

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

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Q.16 Which one of the following categories of animals, is correctly described with no single exception in it? [AIPMT 2012 (Mains)]

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

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Q.17 What will you look for to identify the sex of the following? [AIPMT 2011 (Prelims)]

- (1) Female *Ascaris* – sharply curved posterior end
- (2) Male frog – a copulatory pad on the first digit of the hind limb
- (3) Female cockroach – anal cerci
- (4) Male shark – claspers borne on pelvic fins

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Q.18 Which one of the following groups of animals is correctly matched with its characteristic feature without any exception? [AIPMT 2011 (Prelims)]

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

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Q.19 Which one of the following pairs of animals comprises 'jawless fishes'? [AIPMT 2009]

- (1) Mackerels and rohu
- (2) Lampreys and hagfishes
- (3) Guppies and hagfishes
- (4) Lampreys and eels

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ANSWER KEY

Ques.	1	2	3	4	5	6	7	8	9	10	11
Ans.	3	4	2	2	3	4	4	3	2	2	4
Ques.	12	13	14	15	16	17	18	19			
Ans.	2	3	4	4	2	4	3	2			