

NEET ANIMAL KINGDOM — BASIS OF CLASSIFICATION (SYMMETRY, GERM LAYERS, COELOM, SEGMENTATION, NOTOCHORD) — PYQS

Max. Marks: 68

Questions: 17

Section A (MCQ) — 17 questions

Q.1 Select the incorrect statements from the following:

- A. Digestive system in Platyhelminthes is incomplete.
- B. Bilateral symmetry is a characteristic feature of adult Echinoderms.
- C. Pseudocoelom is possessed by Aschelminthes.
- D. Notochord is persistent throughout life in the class Chondrichthyes.
- E. Members of class Reptilia maintain a constant body temperature.

Choose the answer from the options given below:

[NEET (UG) 2026]

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

Scan or tap for the full solution 

Q.2 Given below are two statements:

Statement-I: When any plane passing through the central axis of the body divides the organism into two identical halves, it is called radial symmetry.

Statement-II: In phylum Echinodermata, both adults and larvae are radially symmetrical.

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

[RE-NEET (UG) 2026]

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

Scan or tap for the full solution 

Q.3 While trying to find out the characteristic of a newly found animal, a researcher did the histology of an adult animal and observed a cavity with presence of mesodermal tissue towards the body wall but no mesodermal tissue was observed towards the alimentary canal. What could be the possible coelom of that animal? [NEET (UG) 2025]

- (1) Schizocoelomate (2) Spongocoelomate
- (3) Acoelomate (4) Pseudocoelomate

Scan or tap for the full solution 

Q.4 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 :

[NEET (UG) 2024]

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

Scan or tap for the full solution 

Q.5 Open Circulatory system is present in :

[RE-NEET (UG) 2024]

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

Scan or tap for the full solution 

Q.6 Which of the following pairs is an incorrect match?

[RE-NEET (UG) 2024]

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

Scan or tap for the full solution 

Q.7 Radial symmetry is NOT found in adults of phylum _____. [NEET (UG) 2023]

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

Scan or tap for the full solution 

Q.8 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.

[NEET (UG) 2021]

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

Scan or tap for the full solution



Q.9 Bilaterally symmetrical and acoelomate animals are exemplified by

[NEET (UG) 2020]

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

Scan or tap for the full solution



Q.10 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

[NEET (UG) 2019]

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

Scan or tap for the full solution



Q.11 Match the following organisms with their respective characteristics:

List-I		List-II	
a.	<i>Pila</i>	i.	Flame cells
b.	<i>Bombyx</i>	ii.	Comb plates
c.	<i>Pleurobrachia</i>	iii.	Radula
d.	<i>Taenia</i>	iv.	Malpighian tubules

Select the correct option from the following:

[NEET (UG) 2019]

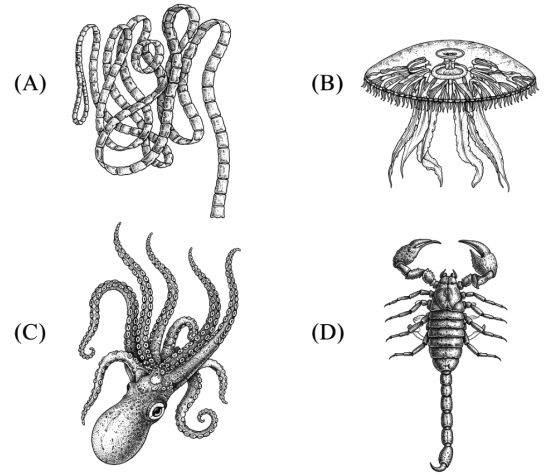
- (1) (a)-(ii), (b)-(iv), (c)-(iii), (d)-(i)
 (2) (a)-(iii), (b)-(ii), (c)-(iv), (d)-(i)
 (3) (a)-(iii), (b)-(ii), (c)-(i), (d)-(iv)
 (4) (a)-(iii), (b)-(iv), (c)-(ii), (d)-(i)

Scan or tap for the full solution



Q.12 The figures (A – D) show four animals. Select the correct option with respect to a common characteristic of two of these animals.

[AIPMT 2011 (Mains)]



- (1) (A) and (B) have cnidoblasts for self-defence
 (2) (A) and (D) respire mainly through body wall
 (3) (C) and (D) have a true coelom
 (4) (B) and (C) show radial symmetry

Scan or tap for the full solution



Q.13 Which one of the following kinds of animals are triploblastic?

[AIPMT 2010 (Prelims)]

- (1) Flatworms (2) Sponges
 (3) Ctenophores (4) Corals

Scan or tap for the full solution



Q.14 Which one of the following statements about certain given animals is correct?

[AIPMT 2010 (Prelims)]

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

Scan or tap for the full solution



Q.15 Which one of the following groups of three animals each is correctly matched with their one characteristic morphological feature? [AIPMT 2008]

Animals	Morphological features
(1) Scorpion, spider, cockroach	ventral solid central nervous system
Animals	Morphological features
(2) Cockroach, locust, Taenia	metameric segmentation
Animals	Morphological features
(3) Liver fluke, sea anemone, sea cucumber	bilateral symmetry
Animals	Morphological features
(4) Centipede, prawn, sea urchin	jointed appendages

Scan or tap for the full solution



Q.16 Metameric segmentation is the characteristic of

[AIPMT 2006]

- (1) Mollusca and Chordata
- (2) Platyhelminthes and Arthropoda
- (3) Echinodermata and Annelida
- (4) Annelida and Arthropoda

Scan or tap for the
full solution



Q.17 Which of the following animals have scattered cells with cell-tissue grade organisation? [AIPMT 2000]

- (1) Sponge
- (2) *Hydra*
- (3) Liver fluke
- (4) *Ascaris*

Scan or tap for the
full solution



ANSWER KEY

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