QB365

Important Questions - Animal Kingdom

11th Standard CBSE

Biology Reg.No. : | | | | | | |

Time : 01:00:00 Hrs

Total Marks : 50

Section-A

1) In some animal groups, the body is found to be divided into compartments with at least some organs/organ repeated. Name this characteristic feature. **1**

2) Name two non-chordate phyla, where animals are radially symmetrical. **1**

3) How important is the presence of air bladder in Pisces? **1**

4) Pseudometamerism is found in..... **1**

5) Name the group which lacks digestive tract. **1**

6) What is the role of radula in Mollusca? **1**

7) What is the difference in blood of annelids and of vertebrates? **1**

8) Name the Aschelminthes in which rhabditiform larva is present. **1**

9) In which phylum canal system is present? **1**

10) Difference between the complete and incomplete digestive system. **1**

Section-B

11) What is a notochord and in which animals it is found? **2**

12) List out the different exoskeletal structures present in different animals. **2**

13) Which of the first group of animals that have endocrine system?How pheromones work in insects? **2**

14) What difference between direct and indirect development? **2**

15) Match the following **2**

A. Amphibia	1. Air biadder
B. Mammals	2. Cartilaginous notochord
C. Chondrichthyes	3. Mammary gland
D. Osteichthyes	4. Dual habitat

16) Why Peripatus is called a connecting link between annelids and arthropods? **2**

17) List two terrestrial adaptations of reptiles **2**

18) What kind of exoskeleton is present in the members of class-Osteichthyes? **2**

19) Why mammals are considered more intelligent as compared to other animals? **2**

20) How will you differentiate between the heart of an amphibian and a reptile? **2**

Section-C

21) Which features make mammals as most successful and dominant animals? **5**

22) Describe briefly the body wall of sponges. **5**

23) Write an account of general features of roundworms. **5**

24) Diagrammatically show the types of symmetry in animals. **5**

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Section-A

1) **1**

It is the segmentation that simultaneously divides body both externally and internally and is also called metamerism.

2) Cnidaria and Echinodermata **1**

3) **1**

In fishes, air bladder regulates buoyancy and helps them in floating in water.If it is absent, animals need to swim constantly to avoid sinking

4) tapeworms **1**

5) Porifera **1**

6) It is the rasping organ that helps in feeding **1**

7) In annelids, haemoglobin is present in plasma, while in vertebrates it is present in RBCs. **1**

8) Ascaris and Enterobius(pinworm) **1**

9) **1**

10) **1**

Digestive system having only a single opening to the outside of the body that serves as both mouth and anus, called incomplete digestive system while a complete digestive system has two separate openings, i.e mouth and anus.

Section-B

11) **2**

Notochord is a flexible rod like material similar to cartilage present on dorsal side between alimentary canal and nervous system in some animals. It is derived from mesoderm.

Notochord is found in chordates (atleast in some stages of their life cycle e.g vertebrates)

12) Different exoskeletal structures present in different animals are **2**

Arthropods	**Chitinous plates called sclerites**
Molluscs	Calcareous
Reptiles	Epidermal scales
Brirds	Epidermal feathers
Mammals	Epidermal hair, nails, claws, horns, and hoofs.

13) **2**

Arthropods are the first animals evolved the endocrine system.Some insects release pheromones that act as sex attractants by which males can locate females even if it is present far away from them.

14) **2**

Differences between the direct and indirect development of as follows.

Direct development In case direct development the life cycle of an adult individual laks earning larval stage in its life cycle. In the adult give rise to young ones which directly develop into the adult.e.g, mammals

indirect development It is present mostly in case of lower animals, the adult individual gives rise to eggs mostly which develop into the adult after being passing through serval larval stages, e.g, echinoderms Ascaris, cockroach have prolonged larval stages in their life cycle.

15) A - 4, B - 3, C - 2, D - 1 **2**

16) **2**

Annelid characters Peripatus have jointed parapodia (legs), haemocoel, trachae for respiration and head with a pair of compound eyes and antennae.

17) Terrestrial adaptations of reptiles are mentioned below **2**

(i) Epidermal scales forming exoskeleton

(ii) Shelled and cledoic egg

18) **2**

In the members of Osteichthyes (bony fishes) shin is covered by Exoskeleton made of large cycloid scales impermeable to water.They reduce osmotic water loss in marine environment and entry of water in fresh environment

19) **2**

In mammals, brain is well-developed with large sized cerebrum, four optic lobes and a nervous band called corpus callosum.Grey matter is more developed which makes them more intelligent among all other animals

20) **2**

In both amphibians and reptiles, heart is three-chambered with two auricles and one ventricle.Ventricle is unpartitioned in the amphibians, while it is incompletely partitioned in the reptiles

Section-C

21) **5**

Features which make mammals as dominant and successful animals are

(i) The presence of an insulating and protective hairy exoskeleton.

(ii) they are warm-blooded so have high rate of metabolism.

(iii) They are viviparous animals and show placentation and intrauterine development which increases the chances for survival of young ones.

(iv) They show high degree of parental care.

(v) They have more developed hearing efficiency due to the presence of pinna, three ear-ossicles and coiled cochlea in the ear.

(vi) They are able to speak through indicative/verbal language.

(vii) They have good power of learning due to the presence of more developed brain.

22) **5**

The body wall of a common sponge consists of three layers which are

(i) **Pinacoderm** (dermal layer) It is an outer cellular layer which consists of

(a) flattened pinacocytes

(b) oval porocytes

(ii) **Choanoderm** (gastral layer) It is inner cellular layer consisting of highly specialised flagellated cells called choanocytes or collar cells.

(iii) **Mesoglial layer** (mesenchyme) It is a non-cellular layer found in between pinacoderm and choanoderm.It has fine dispersed spongin fibres and numerous spicules.It also contains amoebocytes of both pinacoderm and choanoderm.

Amoebocytes are modified into following cells

(a) Archaeocytes (totipotent cells)

(b)Trophocytes (nurse cells)

(c) Thesocytes

(d)Gland cells

(e)Collencytes

(f)Myocytes

(g)Germ cells

(h)Chromocytes

(i)Phagocytes

23) **5**

General features of roundworms are

(i) The body is cylindrical and tapering at both ends.

(ii) No segmentation.

(iii) Bilateral symmetry

(iv) They have organ system level of organisation

(v) The anterior end does not form a distinct head

(vi) There are no locomotory appendages in roundworms

(vii) The body wall consists of firm, non-living, resistant cuticle, epidermis and muscle layer.

(viii) These are pseudocoelomates.

(ix) Hydroskeleton is present.

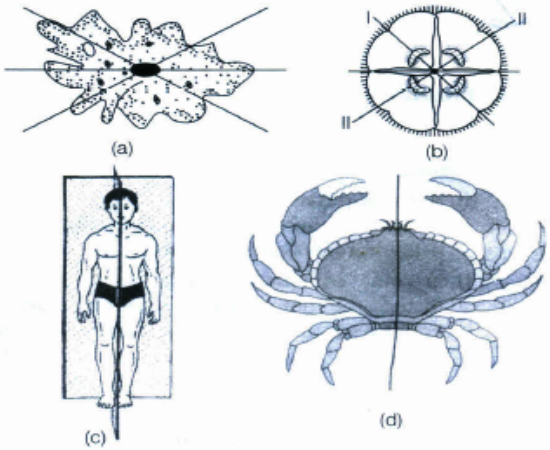
(x) Digestive tract is complete.Respiration occurs by body surface.

(xi) Circulatory system is undeveloped.Excretion occurs through gland cells.

(xii) Sexes are separate.Sexual dimorphism is present. Fertilisation is internal.There is no asexual reproduction.

(xiii)Development is direct.

24) Types of symmetry in animals **5**



Symmetry in animals (a) Asymmetry (b) Radial symmetry (c) and (d) Bilateral symmetry **[5]**