

9th Science Lesson 17 Questions in English

17] Animal Kingdom

1. Which of the following statement is correct?

- 1) Nearly 1.5 million species of organism which have been described are different from one another
- 2) Every organism exhibits variation in their external appearance, internal structure and behaviour, mode of living etc.
 - a) 1 alone
 - b) 2 alone
 - c) 1, 2
 - d) None

Explanation

The variety of living organisms surrounding us is incomprehensible. Nearly **1.5 million species of organism which have been described are different from one another**. The uniqueness is due to the diversity in the life forms whether it is microbes, plants or animals. **Every organism exhibits variation in their external appearance, internal structure and behaviour, mode of living** etc. This versatile nature among the living animals forms the basis of diversity.

2. Assertion(A): The method of arranging organism into groups on the basis of similarities and differences is called as classification

Reason(R): The study of various organisms would be difficult without a suitable method of Classification

- a) Both (A) and (R) are correct, but (R) does not explain (A)
- b) Both (A) and (R) are wrong
- c) **Both (A) and (R) are correct and (R) explains (A)**
- d) (A) is Correct and (R) is wrong

Explanation

The **diversity among the living organisms can be studied in an effective way by arranging animals in an orderly and systematic manner**. The study of various organisms would be difficult without a suitable method of classification. The method of arranging organism into groups on the basis of similarities and differences is called classification.

3. _____ is the science of classification which makes the study of wide variety of organisms easier.

- a) Anatomy
- b) **Taxonomy**
- c) Autonomy
- d) Clarification

Explanation

Taxonomy is the science of classification which makes the study of wide variety of organisms easier. It helps us to understand the relationship among different group of animals.

4. The first systematic approach to the classification of living organisms was made by _____

- a) Charles Darwin
- b) **Carolus Linnaeus**
- c) Gregor Mendel
- d) Asa Gray

Explanation

The **first systematic approach to the classification of living organisms** was made by a Swedish botanist, **Carolus Linnaeus**. He generated the standard system for naming organisms in terms of genus, species and more extensive groupings using Latin terms.

5. Classification is the ordering of organism into groups on the basis of _____

- 1) Similarities
 - 2) Dissimilarities
 - 3) Relationships
- a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) **All the above**

Explanation

Classification is the ordering of organism into groups on the basis of their **similarities, dissimilarities and relationships**.

6. Which of the following is not one of the parts in five kingdom classification?

- a) Protista
- b) Plants
- c) Fungai

d) Chromista**Explanation**

The method of arranging organism into groups on the basis of similarities and differences is called classification. The five-kingdom classification are **Monera, Protista, Fungi, Plantae and Animalia**.

7. On which basis five kingdom classification is made?

- 1) Cell structure
 - 2) Mode of nutrition
 - 3) Reproduction
 - 4) Body organization
- a) 1, 3, 4
 - b) 2, 3, 4
 - c) 1, 2, 3
 - d) **All the above**

Explanation

The five kingdom classification groups are formed **based on cell structure, mode of nutrition, body organization and reproduction**. On the basis of hierarchy of classification, the organisms are separated into smaller and smaller groups which form the basic unit of classification.

8. Which of the following is lowest taxonomic category?

- a) Genus
- b) **Species**
- c) Order
- d) Kingdom

Explanation

Species is the lowest taxonomic category. For example, the large Indian parakeet (*Psittacula eupatra*) and the green parrot (*Psittacula krameri*) are two different species of birds. They belong to different species *eupatra* and *krameri* and cannot interbreed.

9. Which of the following are placed in same genus?

- 1) Indian wolf
 - 2) Indian Tiger
 - 3) Indian jackal
- a) 1, 2
 - b) **1, 3**
 - c) 2, 3
 - d) All the above

Explanation

Genus is a group of closely related species which constitute the next higher category called genus. For example, the **Indian wolf (*Canis pallipes*) and the Indian jackal (*Canis aures*) are placed in the same genus *Canis*.**

10. Which of the following share form a family?

- 1) Tiger
- 2) Leopard
- 3) Cat
- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) **All the above**

Explanation

A group of genera with several common characters form a family. For example, **leopard, tiger and cat** share some common characteristics and belong to the **larger cat family *Felidae***.

11. Which of the following statement is correct?

- 1) A number of related families having common characters are placed in Phylum
- 2) Monkeys, baboons, apes and Man although belong to different families, are placed in the same order Primates
- 3) They all possess some common features.
- a) 1, 2
- b) 1, 3
- c) **2, 3**
- d) All the above

Explanation

A number of related families having common characters are placed in an order. Monkeys, baboons, apes and Man although belong to different families, are placed in the same order Primates. Since all these animals possess some common features, they are placed in the same order.

12. Which animals share some common features such as the presence of skin and mammary glands?

- 1) Rabbit
- 2) Whales
- 3) Human
- 4) Shark

- a) 1, 2, 4
- b) 2, 3, 4
- c) 1, 2, 3
- d) All the above

Explanation

Related or similar orders together form a class. The orders of different animals like those of **rabbit, rat, bats, whales, chimpanzee and human share some common features such as the presence of skin and mammary glands**. Hence, they are placed in class Mammalia.

13. Which of the following constitute Phylum Chordata?

- 1) Birds
- 2) Fishes
- 3) Frogs
- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) All the above

Explanation

Classes which are related with one another constitute a phylum. The **classes of different animals like mammals, birds, reptiles, frogs and fishes constitute Phylum Chordata** which have a notochord or back bone.

14. _____ is the highest category taxonomic category.

- a) Species
- b) Phylum
- c) **Kingdom**
- d) Order

Explanation

Kingdom is the highest category and the largest division to which microorganisms, plants and animals belong to. Each kingdom is fundamentally different from one another, but has the same fundamental characteristics in all organisms grouped under that Kingdom.

15. Arrange the following in order?

- 1) Kingdom
- 2) Phylum
- 3) Family
- 4) Species

- a) 3, 1, 4, 2
- b) 2, 3, 4, 1
- c) 1, 2, 3, 4
- d) 1, 3, 2, 4

Explanation

Kingdom
Phylum
Class
Order
Family
Genus
Species

16. Based on which of the following animals are grouped as unicellular or multicellular?

- 1) Cell
 - 2) Tissue
 - 3) Organ
 - 4) Organ system
- a) 1, 2, 3
 - b) 2, 3, 4
 - c) 1, 2, 4
 - d) All the above

Explanation

We can divide the Animal kingdom based on the level of organization (arrangement of cells), body symmetry, germ layers and nature of coelom. **Animals are grouped as unicellular or multicellular based on cell, tissue, organ and organ system level of organization.**

17. Which of the following statement is correct?

- 1) Symmetry is plane of arrangement of body parts
 - 2) Radial symmetry and bilateral symmetry are the two types of symmetry.
 - 3) In radial symmetry the body parts are arranged around the central axis
- a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) All the above

Explanation

Symmetry is plane of arrangement of body parts. Radial symmetry and bilateral symmetry are the two types of symmetry. In radial symmetry the body parts are arranged around the central axis.

18. Which of the following is bilateral symmetry?

- a) Hydra
- b) Frog**
- c) Jelly fish
- d) Star fish

Explanation

In **bilateral symmetry**, the body parts are arranged along a central axis. If the animal is cut through the central axis, we get two identical halves e.g. **Frog**.

19. Which of the following is an example of radial symmetry?

- 1) Hydra
 - 2) Frog
 - 3) Jelly fish
 - 4) Star fish
- a) 1, 3, 4**
 - b) 2, 3, 4
 - c) 1, 2, 4
 - d) All the above

Explanation

In **radial symmetry** the body parts are arranged around the central axis. If the animal is cut through the central axis in any direction, it can be divided into similar halves. e.g. **Hydra, jelly fish and star fish**.

20. Which of the following statement is correct?

- 1) Germ layers are formed during the development of an embryo
 - 2) Organisms with two germ layers, the ectoderm and the endoderm are called diploblastic animals
 - 3) Organisms with three germ layers, ectoderm, mesoderm and endoderm are called triploblastic animals
- a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) All the above**

Explanation

Germ layers are formed during the development of an embryo. These layers give rise to different organs, as the embryo becomes an adult. **Organisms with two germ layers**, the ectoderm and the endoderm are called **diploblastic animals**. e.g Hydra. **Organisms with three germ layers**, ectoderm, mesoderm and endoderm are called **triploblastic animals**. e.g Rabbit.

21. Which of the following statement about Coelom is correct?

- 1) It is a non-fluid-filled body cavity.
- 2) A true body cavity or coelom is one that is located within the mesoderm
- 3) Based on the nature of the coelom, animals are divided into 3 groups.
 - a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) All the above

Explanation

Coelom is a fluid-filled body cavity. It separates the digestive tract from the body wall. A true body cavity or coelom is one that is located within the mesoderm. Based on the nature of the coelom, animals are divided into 3 groups.

22. Match the following

- | | |
|----------------------|--------------|
| I. Acoelomates | 1. Earthworm |
| II. Pseudocoelomates | 2. Roundworm |
| III. Coelomates | 3. Tapeworm |
- a) 1, 3, 2
 - b) 3, 2, 1
 - c) 2, 1, 3
 - d) 1, 2, 3

Explanation

1. Acoelomates do not have a body cavity e.g Tapeworm.
2. Pseudocoelomates have a false body cavity e.g Roundworm.
3. Coelomates or Eucoelomates have a true coelom e.g Earthworm, Frog.

23. Which of the following statement is correct?

- 1) Animal Kingdom is further divided into two groups based on the presence or absence of notochord
- 2) Animals which do not possess notochord are called as vertebrates
- 3) Animals which possess notochord or backbone are called as Chordates
 - a) 1, 2

- b) 2, 3
- c) 1, 3
- d) All the above

Explanation

Animal Kingdom is further divided into two groups based on the presence or absence of notochord as below.

1. In-vertebrata
2. Chordata-Pro-Chordata and Vertebrata

Animals which do not possess notochord are called as Invertebrates or Non- chordates. Animals which possess notochord or backbone are called as Chordates.

24. Notochord is a rod like structure formed on the_____ side of the body

- a) Mid-dorsal
- b) Mid-lateral
- c) Posterior
- d) Anterior

Explanation

Notochord is a rod like structure formed on the mid-dorsal side of the body during embryonic development. Except primitive forms in which the notochord persists throughout life in all other animals it is replaced by a backbone.

25. Which of the following statement is correct?

- 1) Carolus Linnaeus introduced the method of naming the animals with two names known as binomial nomenclature
 - 2) The first name is called species and the first letter of genus is denoted in capital and the second one is the genus name denoted in small letter
- a) 1 alone
 - b) 2 alone
 - c) 1, 2
 - d) None

Explanation

Carolus Linnaeus introduced the method of naming the animals with two names known as **binomial nomenclature**. The **first name is called genus** and the first letter of genus is denoted in capital and the **second one is the species name** denoted in small letter.

26. Match the following

- | | |
|---------------|--------------------------|
| I. Amoeba | 1. Periplaneta americana |
| II. Tapeworm | 2. Taenia solium |
| III. Leech | 3. Amoeba proteus |
| IV. Cockroach | 4. Hirudinaria granulosa |
- a) 3, 1, 4, 2
b) 3, 2, 4, 1
 c) 1, 3, 4, 2
 d) 4, 1, 2, 3

Explanation

Amoeba	<i>Amoeba proteus</i>
Hydra	<i>Hydra vulgaris</i>
Tapeworm	<i>Taenia solium</i>
Roundworm	<i>Ascaris lumbricoides</i>
Earthworm	<i>Lampito mauritii</i> / <i>Perionyx excavatus</i>
Leech	<i>Hirudinaria granulosa</i>
Cockroach	<i>Periplaneta americana</i>

27. Match the following

- | | |
|----------------|---------------------|
| I. Wall lizard | 1. Felis felis |
| II. Cat | 2. Panthera tigris |
| III. Tiger | 3. Pavo cristatus |
| IV. Peacock | 4. Podarcis muralis |
- a) 3, 1, 2, 4
b) 4, 1, 2, 3
 c) 1, 4, 2, 3
 d) 2, 1, 4, 3

Explanation

Snail	<i>Pila globosa</i>
Star fish	<i>Asterias rubens</i>
Frog	<i>Rana hexadactyla</i>
Wall lizard	<i>Podarcis muralis</i>
Crow	<i>Corvus splendens</i>
Peacock	<i>Pavo cristatus</i>
Dog	<i>Canis familiaris</i>
Cat	<i>Felis felis</i>
Tiger	<i>Panthera tigris</i>
Man	<i>Homo sapiens</i>

28. Which of the following statement about Phylum Porifera is correct?

- 1) These are multicellular, non-motile aquatic organisms, commonly called as sponges.
- 2) Body is perforated with many pores called ostia.
- 3) Water enters into the body through ostia and leads to a canal system

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) All the above

Explanation

Phylum Porifera are **multicellular, non-motile aquatic** organisms, commonly called as sponges. They exhibit cellular grade of organization. Body is perforated with many pores called **ostia**. Water enters into the body through ostia and leads to a canal system. It circulates water throughout the body and carries food, oxygen. The body wall contains spicules, which form the skeletal framework. Reproduction is by both asexual and sexual methods. e.g- Euplectella, Sycon.

29. Which of the following statement about Phylum Coelenterata is correct?

- 1) Coelenterates are aquatic organisms, mostly marine and few fresh water forms
 - 2) It has a central gastrovascular cavity called coelenteron with mouth surrounded by short tentacles
 - 3) Body wall is triploblastic with three layers
- a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) All the above

Explanation

Coelenterates are aquatic organisms, mostly marine and few fresh water forms. They are multicellular, radially symmetrical animals, with tissue grade of organization. **Body wall is diploblastic with two layers.** An outer ectoderm and inner endoderm are separated by noncellular jelly like substance called mesoglea. It has a central gastrovascular cavity called coelenteron with mouth surrounded by short tentacles. The tentacles bear stinging cells called cnidoblast or nematocyst.

30. Coelenterates exhibit_____

- a) Dimorphism
- b) Tri-morphism
- c) **Polymorphism**
- d) None

Explanation

Many **coelenterates exhibit polymorphism**, which is the variation in the structure and function of the individuals of the same species. They reproduce both asexually and sexually. e.g. Hydra, Jellyfish.

31. Which of the following statement about Phylum Platyhelminthes is correct?

- 1) They are bilaterally symmetrical, triploblastic, acoelomate animals
 - 2) These worms are hermaphrodites
 - 3) Suckers and hooks help the animal to attach itself to the body of the host
- a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) All the above

Explanation

Phylum Platyhelminthes are bilaterally symmetrical, triploblastic, acoelomate (without body cavity) animals. Most of them are parasitic in nature. Suckers and hooks help the animal to attach itself to the body of the host. Excretion occurs by specialized cells called flame cells. **These worms are hermaphrodites having both male and female reproductive organs in a single individual.** e.g- Liver-fluke, Tapeworm.

32. Which of the following is not the feature of Phylum Aschelminthes?

- a) Radial symmetry
- b) Bilateral symmetry
- c) Triploblastic
- d) None

Explanation

Aschelminthes are **bilaterally symmetrical, triploblastic animals**. The body cavity is a pseudocoelom. They exist as free-living soil forms or as parasites.

33. Which of the following diseases caused by nematodes in human beings?

- 1) Cholera
 - 2) Elephantiasis
 - 3) Ascariasis
- a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) All the above

Explanation

Phylum Aschelminthes is unsegmented and covered by thin cuticle. Sexes are separate. The most common diseases caused by nematodes in human beings are **elephantiasis and ascariasis**. e.g- Ascaris, Wuchereria.

34. Which of the following does not belongs to Phylum Annelida?

- a) Nereis
- b) Leech
- c) Earthworm
- d) Centipede

Explanation

Phylum Annelida also known as Segmented worms. **Centipedes belongs to Phylum Arthropoda.** Examples of Segmented worms are **Nereis, Earthworm, Leech.**

35. Which of the following statement about Phylum Annelida?

- 1) They are bilaterally symmetrical and triploblastic
 - 2) Setae and parapodia are locomotor organs.
 - 3) Sexes may be separate or united (hermaphrodites)
- a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) **All the above**

Explanation

Phylum Annelida (Segmented worms) are **bilaterally symmetrical, triploblastic**, first true coelomate animals with organ-system grade of organization. Body is externally divided into segments called metameres joined by ring like structures called annuli. It is covered by moist thin cuticle. **Setae and parapodia are locomotor organs. Sexes may be separate or united (hermaphrodites).**

36. _____ is the largest phylum of the animal kingdom

- a) Annelida
- b) Aschelminthes
- c) Platyhelminthes
- d) **Arthropoda**

Explanation

Phylum Arthropoda are animals with **animals with jointed legs. Arthropoda** is the largest phylum of the animal kingdom.

37. Which of the following statement about Phylum Arthropoda?

- 1) They are Radial symmetrical, triploblastic and coelomate animals.
- 2) The body is divisible into head, thorax and abdomen

- 3) Exoskeleton is made of chitin and is shed periodically as the animal grows
- a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) All the above

Explanation

Phylum Arthropoda are bilaterally symmetrical, triploblastic and coelomate animals. The body is divisible into head, thorax and abdomen. Each thoracic segment bears paired jointed legs. Exoskeleton is made of chitin and is shed periodically as the animal grows. The casting off and regrowing of exoskeleton is called moulting.

38. Which of the following is not a Phylum Arthropoda?

- a) Centipede
- b) Prawn
- c) Crab
- d) **Ascaris**

Explanation

Prawn, Crab, Cockroach, Millipede, Centipedes, Spider, Scorpion are the examples of Phylum Arthropoda (Animals with jointed legs). **Ascaris is an example of Phylum Aschelminthes.**

39. Which of the following are the respiration methods of Phylum Arthropoda?

- a) Gills
- b) Body surface
- c) Tracheae
- d) **a or b or c**

Explanation

Body cavity of Phylum Arthropoda is filled with haemolymph (blood). The blood does not flow in blood vessels and circulates throughout the body (open circulatory system). Respiration is through body surface, gills or tracheae (air tubes). Excretion occurs by malpighian tubules or green glands. Sexes are separate.

40. Centipede means_____

- a) **Hundred legs**
- b) Thousand legs
- c) Five Hundred legs
- d) Sixty legs

Explanation

Centipede means hundred legs. But most species have only 30 pairs. Millipedes have two pairs of legs on each segment. This name means thousand legs. But, most millipedes have only about a hundred.

41. Which of the following statement is correct about Phylum Mollusca?

- 1) They are diversified group of animals living in marine, fresh water and terrestrial habitats.
 - 2) Body is bilaterally symmetrical, soft and without segmentation
 - 3) Sexes are separate with larval stages during development
- a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) **All the above**

Explanation

Phylum Mollusca are diversified group of **animals living in marine, fresh water and terrestrial habitats.** Body is **bilaterally symmetrical, soft and without segmentation.** It is divided into head, muscular foot and visceral mass. The foot helps in locomotion. The entire body is covered with fold of thin skin called mantle, which secretes outer hard calcareous shell. Respiration is through gills (ctenidia) or lungs or both. **Sexes are separate with larval stages during development.** e.g-Garden snail, Octopus.

42. Which of the following are capable by Octopus?

- a) Emotion
- b) Empathy
- c) Personality
- d) **All the above**

Explanation

Octopus is the only invertebrate that is capable of **emotion, empathy, cognitive function, self-awareness, personality and even relationships with humans.** Some speculate that without humans, octopus would eventually take our place as the dominate life form on earth.

43. Which of the following statement is correct about Phylum Echinodermata?

- 1) They are exclusively free-living marine animals.
 - 2) Body wall is covered with spiny hard calcareous ossicles
 - 3) Garden Snail is an example of Phylum Echinodermata
- a) 1, 2
 - b) 1, 3

- c) 2, 3
- d) All the above

Explanation

Phylum Echinodermata are exclusively **free-living marine animals**. These are triploblastic and true coelomates with organ-system grade of organization. Adult animals are radially symmetrical but larvae remain bilaterally symmetrical. A unique feature is the presence of fluid filled water vascular system. Locomotion occurs by tube feet. Body wall is covered with spiny hard calcareous ossicles. e.g- **Star fish, Sea urchin**.

44. Which of the following statement is correct about Phylum Hemi-Chordata?

- 1) Hemichordates are fresh water organisms with soft, vermiform and unsegmented body.
 - 2) They have gill slits but do not have notochord
 - 3) They are ciliary feeders and mostly remain as tubiculous forms
- a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) All the above

Explanation

Hemichordates are marine organisms with soft, vermiform and unsegmented body. They are bilaterally symmetrical, coelomate animals with non-chordate and chordate features. They have gill slits but do not have notochord. They are ciliary feeders and mostly remain as tubiculous forms. E.g- Balanoglossus (Acorn worms).

45. Which of the following are the subphylum of Pro-Chordata?

- 1) Urochordata
 - 2) Cephalo-Chordata
 - 3) Neo-Chordata
- a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) All the above

Explanation

The pro-chordates are considered as the forerunners of vertebrates. Based on the nature of the notochord, pro-Chordata is classified into subphylum Urochordata and subphylum Cephalo-Chordata.

46. Which of the following is example of Urochordata?

- a) Star fish
- b) **Ascidian**
- c) Amphioxus
- d) Carps

Explanation

In Subphylum Urochordata, Notochord is present only in the tail region of free-living larva. Adults are sessile forms and mostly degenerate. The body is covered with a tunic or test. e.g. **Ascidian**.

47. Which of the following is an example of Cephalo-Chordata?

- a) Star fish
- b) Ascidian
- c) **Amphioxus**
- d) Carps

Explanation

Cephalochordates are small fish like marine chordates with unpaired dorsal fins. The notochord extends throughout the entire length of the body. E.g. **Amphioxus**.

48. Vertebrata are grouped into_____ classes.

- a) 3
- b) 5
- c) 7
- d) 6

Explanation

Vertebrata group is characterized by the presence of vertebral column or backbone. Notochord in an embryonic stage gets replaced by the vertebral column, which forms the chief skeletal axis of the body. **Vertebrata are grouped into six classes.**

49. Which of the following statement is correct?

- 1) Cyclostomes are jawless vertebrates
 - 2) They are ectoparasites of fishes
 - 3) Body is elongated and eel like.
- a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) **All the above**

Explanation

Cyclostomes are **jawless vertebrates** (mouth not bounded by jaws). **Body is elongated and eel like.** They have circular mouth. Skin is slimy and scaleless. **They are ectoparasites of fishes.** E.g. Hagfish.

50. Fishes are_____ blooded

- a) Warm
- b) Cold**
- c) Both a and b
- d) None

Explanation

Fishes are **poikilothermic (cold-blooded)**, aquatic vertebrates with jaws. The streamlined body is divisible into head, trunk and tail. Locomotion is by paired and median fins. Their body is covered with scales. Respiration is through gills. The heart is two chambered with an auricle and a ventricle.

51. What is the length of smallest vertebrate?

- a) 10 cm
- b) 10 mm**
- c) 10 m
- d) 1 cm

Explanation

The **smallest vertebrate, Philippine goby/dwarf pygmy goby** is a tropical species fish found in brackish water and mangrove areas in south East Asia, **measuring only 10 mm in length.**

52. Which of the following statement is correct about Amphibia?

- 1) These are the first four legged (tetra-pods) vertebrates with dual adaptation to live in both land and water
- 2) The heart is four chambered with two auricles and two ventricle.
- 3) Frog and Toad are examples
 - a) 1, 2
 - b) 1, 3**
 - c) 2, 3
 - d) All the above

Explanation

Amphibia are the first four legged (tetra-pods) vertebrates with dual adaptation to live in both land and water. The body is divisible into head and trunk. Their skin is moist and have mucus glands. Respiration is through gills, lungs, skin or buccopharynx. The heart is three chambered with two

auricles and one ventricle. Eggs are laid in water. The tadpole larva, transforms into an adult. e.g- Frog, Toad.

53. What is the average weight of Chinese giant salamander *Andrias davidians*?

- a) 75 kg
- b) 65 kg**
- c) 35 kg
- d) 85 kg

Explanation

The Chinese giant salamander *Andrias davidians* is the largest amphibian in the world. Its length is about five feet and eleven inches. **It weighs about 65 kg, found in Central and South China.**

54. Which of the following belongs to Reptilia?

- 1) Calotes
- 2) Lizard
- 3) Tortoise
- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) All the above**

Explanation

Reptilia are vertebrates are fully adapted to live on land. Their body is covered with horny epidermal scales. Respiration is through lungs. The heart is three chambered with an exemption of crocodiles, which have four-chambered heart. Most of the reptiles lay their eggs with tough outer shell e.g. Calotes, Lizard, Snake, Tortoise, Turtle.

55. Which of the following statement is correct about Aves?

- 1) Birds are homeothermic (warm-blooded)
- 2) Bones are filled with air (pneumatic bones), which reduces the body weight.
- 3) They lay large yolk laden eggs.
- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) All the above**

Explanation

Birds are homeothermic (warm-blooded) animals with several adaptations to fly. The spindle or boat shaped body is divisible into head, neck, trunk and tail. The body is covered with feathers.

Forelimbs are modified into wings for flight. Hindlimbs are adapted for walking, perching or swimming. The respiration is through lungs, which have air sacs. **Bones are filled with air** (pneumatic bones), which reduces the body weight. They **lay large yolk laden eggs**. They are covered by hard calcareous shell. e.g. Parrot, Crow, Eagle, Pigeon, Ostrich.

56. Which of the following statement is correct about Mammalia?

- 1) Heart is Five chambered and they breathe through lungs
- 2) Placenta is the unique characteristic feature of mammals.
- 3) The external ears or pinnae is present.
 - a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) All the above

Explanation

Mammals are warm-blooded animals. The skin is covered with hairs. It also bears sweat and sebaceous (oil) glands. The body is divisible into head, neck, trunk and tail. Females have mammary glands, which secrete milk for feeding the young ones. **The external ears or pinnae is present.** Heart is **four chambered and they breathe through lungs**. Except egg laying mammals (Platypus, and Spiny anteater), all other mammals give birth to their young ones (viviparous). Placenta is the unique characteristic feature of mammals. e.g. Rat, Rabbit, Man.

57. _____ is the biggest vertebrate animal.

- a) Shark
- b) **Blue whale**
- c) Sea Turtle
- d) All the above

Explanation

The gigantic Blue whale which is 35 meters long and 120 tons in weight is the biggest vertebrate animal. Mammalia means mamma-breast.