Solution

ANIMAL KINGDOM WS

Class 11 - Biology

1. **(d)** Therapsida
Explanation: The ancestor of mammals belongs to class Therapsida. Therapsida is a group of synapsids that includes mammals and their ancestors.

2. **(c)** Osmoregulation
Explanation: Osmoregulation is the process of maintaining the correct amount of water in body.

3. **(b)** Testudo
Explanation: Examples of poisonous snakes are Naja(Cobra), Bangarus(Krait), Vipera(Viper). Testudo is a non-poisonous snake. It is found in Europe.

4. **(c)** Tadpole
Explanation: The larvae of urochordates are called tadpole. Tadpole change into adults by the process of metamorphosis. The structure of tadpole is totally different from the adult ones.

5. **(a)** Blue whale
Explanation: The blue whale is the largest mammals about 30 meter in length and 180 tons in weight.

6. **(d)** Class Cyclostomata
Explanation: The organism beloging to class Cyclostomes have a sucking and circular mouth without jaws.They are primitive vertebrates. The cyclostomes are marine or fresh-water vertebrates.

7. **(a)** Maintain balance and to swim up and down Maintain buoyancy for swimming
Explanation: Air bladder is present in body fish that help them in maintaining balance and to swim up and down. Air bladder arises from the dorsal wall of the oesophagus.

8. **(c)** Heloderma
Explanation: Heloderma is the most poisonous, which is a verminous lizard native to the southwestern united states and Mexico.

9. **(b)** Ornithorhynchus
Explanation: Ornithorhynchus is a mammal but lays egg.

10. **(a)** 1973
Explanation: Project tiger is a tiger conservation programme launched in 1973 by the Government of India to maintain the rapidly decreasing number of tigers in India.

11. **(a)** Platypus
Explanation: Platypus is the oviparous that lays eggs.

12. **(b)** Python
Explanation: Python is non-poisonous still they attack human beings because they are very dangerous and powerful.

13. **(c)** Giant panda
Explanation: The giant panda is going to extinct due to low reproductive rate. They live in mountain ranges in central China. There reproductively rate is very less due to climatic conditions.

14. **(a)** Lizards and Sparrow
Explanation: Lizards and Sparrow are urecotelic. They release highly concentrated uric acid as an excretory product.

15.

(b) Chiroptera

Explanation: Bat is a member of order Chiroptera of class Mammalia. Bats are only mammals to have achieved powered to flight in which forelimb is modified as wings.

16.

(c) Warm blooded

Explanation: Warm-blooded, 4 chambered heart are the common features of aves and mammals.

17.

(b) Liver fluke

Explanation: Most of the animals are not able to fertilize their own egg by sperms but in liver fluke, self-fertilization takes place. Earthworm also possesses both male and female reproductive organs in the same individual but not able to fertilize its own egg.

18. **(a)** Presence of notochord

Explanation: The presence of the notochord is the main characteristic of vertebrates. Notochord is the defining structure of the chordates and has essential roles in vertebrate development. It serves as a source of midline signals that pattern surrounding tissues and as a major skeletal element of the developing embryo.

19.

(c) Double circulation

Explanation: Double circulation is the flow of blood twice through heart.

20.

(b) Amphibian

Explanation: Salamanders are a group of amphibians typically characterized by a lizard-like appearance, with slender bodies, blunt snouts, short limbs projecting at right angles to the body, and the presence of a tail in both larvae and adults.

21.

(b) 3

Explanation: 3 chambered heart is found in reptiles i.e. two auricles and one ventricle.

22.

(c) Ammonotelic

Explanation: Ammonotelic - it is the type of excretion where ammonia is the main nitrogenous waste material.

23.

(b) Crocodile

Explanation: Reptiles generally possess three-chamber heart, two upper chamber and single lower chamber. But in crocodile, the heart is four-chambered having two atrium and two ventricles.

24.

(d) Monkey, Chimpanzee, Man

Explanation: Monkey, Chimpanzee, Man, all belong to phylum Chordata, subphylum vertebrates, class mammals.

25.

(b) Torpedo

Explanation: Torpedo fish has electric organ. They are known for being capable of producing an electric discharge ranging from 8 to 220 volts depending on species.

26. **(a)** Lancelet

Explanation: Lancelets are classified in the phylum Chordata, subphylum Cephalochordata. lancelet, the name for small, fishlike lower chordate also called amphioxus it shows many affinities with the vertebrates. There are about 30 lancelet species, most belonging to the genus Branchiostoma (formerly Amphioxus). Lancelets are usually about 1 in. (2.5 cm) long, with transparent bodies tapered at both ends. There is no distinct head and no paired fins.

27.

(d) Chameleon and Turtle

Explanation: Chameleon and Turtle both are reptiles, having non-glandular skin.

28.

(c) King cobra

Explanation: The snakes generally do not build nest and lives in a burrow made by other animals or natural caves but King cobra found in India build their nest.

29.

(d) Shark
Explanation: Sharks have a two-chambered heart, with an atrium (also called the auricle) and a ventricle.

30.

(d) Syrinx
Explanation: The voice producing organ of birds is called Syrinx. Voice is produced due to pressure variation. In human beings voice producing organ is called the larynx.

31.

(b) Goat
Explanation: Wool is generally obtained from sheep but the world's highly prized wool yielding Paschimina breed is a goat generally reared in Kashmir valley. The wool is very soft with a lot of warmth.

32.

(b) 4
Explanation: Crocodile belongs to reptile but have 4 chambered heart.

33. **(a)** Have gill slit at some stage of life
Explanation: Crocodile and penguins are similar to whale and dogfish in having gill slits at some stage of their life cycle which is used as respiratory organs.

34.

(b) Presence of mammary glands
Explanation: The presence of mammary glands is the charecteristic feature of mammals.

35. **(a)** Class Aves
Explanation: The endoskeleton is fully ossified (bony) and the long bones are hollow with air cavities (pneumatic) in class aves.

36.

(c) Two upper incisors
Explanation: In elephants, two upper front teeth are modified into tusk of elephants. The continuous growth of tusk is enabled by formative tissues in the apical opening of the root of the teeth.

37.

(c) Crocodiles, Birds, Mammals
Explanation: Birds, Mammals, and Crocodiles (the exception of reptiles) have 4 chambered heart.

38.

(d) Head louse living on the human scalp and laying eggs in the hair.
Explanation: The parasites live and obtain nutrients from the host. Head louse living on the human scalp and laying eggs in the hair are parasites in true sense.

39. **(a)** Mammalia
Explanation: Mammalia is found in a variety of habitats - polar ice caps, deserts, mountains, forests, grasslands, and dark caves. Some of them have adapted to fly or live in water. The most unique mammalian characteristic is the presence of milk-producing glands (mammary glands) by which the young ones are nourished. They have two pairs of limbs, adapted for walking, running, climbing, burrowing, swimming, or flying.

40.

(d) Interstitial cells
Explanation: Interstitial cells are reserve cells to differentiate into any type of cell.

41.

(c) Insects
Explanation: Insects have the highest number of species in nature. Insect belongs to arthropods family of class Mammalia. They are characterized by jointed legs.

42.

(d) Locusta

Explanation: Locust (Locusta) is a gregarious pest belonging to phylum Arthropoda.

43. **(d)** Mollusca
Explanation: Mollusca is the second largest phyllum after Arthrhopoda.

44. **(c)** Earthworm and leeches
Explanation: Earthworms and leeches are monoecious, contain both male and female reproductive organs in the same individual.

45. **(a)** Annelida
Explanation: Annelida body is divided into small segments.

46. **(b)** Pheretima
Explanation: In Pheretima (earthworm) both male and female organs are found in the same organism.

47. **(c)** Radula
Explanation: The mouth of molluscs contains a file-like rasping organ for feeding, called a radula.

48. **(a)** Malphighian tubules
Explanation: The insects belong to phylum Arthropoda and hence, the excretory organ is Malphighian tubules.

49. **(a)** Phylum Ctenophora
Explanation: The body of phylum Ctenophora bears eight external rows of ciliated comb plates, which help in locomotion.

50. **(c)** 1-2 months
Explanation: The life-span is the time period from birth to death of an organism. The life-span of honey bee drone is 1-2 months only. Queen has the longest life span in all three kinds of honey bees.

51. **(c)** Pseudocoelomates
Explanation: Pseudocoelomates are those where the false body cavity is found between the body wall and gut wall.

52. **(d)** Phylum Mollusca
Explanation: Phylum Mollusca is the second largest phylum after Arthropoda.

53. **(d)** Phylum Echinodermata
Explanation: The animals of Phylum - Echinodermata have an endoskeleton of calcareous ossicles and, hence, the name Echinodermata. All are marine with the organ-system level of organization. The adult echinoderms are radially symmetrical but larvae are bilaterally symmetrical.
They are triploblastic and coelomate animals. The digestive system is complete with a mouth on the lower (ventral) side and anus on the upper (dorsal) side.

54. **(c)** Uric acid
Explanation: The main nitrogenous excretory wastes of insects are uric acid. Uric acid is released in concentrated form. Other animals release nitrogenous wastes in form of ammonia and urea.

55. **(d)** Tasar silk
Explanation: The silk produced by Antheraeamylitta is called Tasar silk. This silk is considered as the most durable and best quality silk.

56. **(c)** Octopus
Explanation: Octopus belongs to molluscs but does not contain the shell. All other molluscs possess hard calcareous cells around their body to act as a protective covering.

57. **(a)** Metamerism
Explanation: Metamerism or metameric segmentation, linear series of repeating parts each being a metamere.

58. **(b)** Sycon
Explanation: Sycon does not perform locomotion, although it is an animal. Sycon remains attached to the substratum and does not move from one place to another.

59. **(d)** Platyhelminthes
Explanation: Phylum Platyhelminthes does not possess a coelom. The coelom is the body cavity in between organs. Animals with coelom are called coelomate and those without it are called acoelomate.

60. **(d)** Echinodermata
Explanation: Echinodermata contain water vascular system that help in nuttrition and respiration.

61. **(d)** Outside the body
Explanation: In amphibians, syngamy occurs in the external medium (water) i.e. outside the body of organisms while in reptiles, syngamy occurs inside the body of an organism.

62. **(b)** Proboscis gland
Explanation: Saccoglossus belong to phylum Hemichordata and hence the excretory organ is proboscis gland.

63. **(c)** Malpighian tubules
Explanation: Malpighian tubules is the excretory organ of Arthropoda. The system consists of branching tubules extending from the alimentary canal that absorbs solutes, water, and wastes from the surrounding hemolymph.

64. **(b)** Secretion from the body
Explanation: Lac is obtained by lac insects as secretion from the body. This secretion is wounded around the cocoon of lac insects.

65. **(d)** Asterias
Explanation: Asterias does not have an excretory system. Asterias includes starfish or sea star. They are exclusively marine.

66. **(a)** Phylum Coelenterata
Explanation: The germinal layer shows diploblastic. Phylum Coelenterata shows this type of germinal layers.

67. **(d)** (a)-(ii), (b)-(iii), (c)-(iv), (d)-(i)
Explanation: The cellular level of organizational in Spongilla (phylum Porifera), tissue level in obelia(phylum Coelenterata), organ level in Fasciola (phylum Platyhelminthes) and organ system level in Pheritima (phylum Annelida).

68. **(a)** 4
Explanation: Bat and whales have a four-chambered heart. Upper two chambers are called the atrium and lower two chambers are called the ventricle. All mammals have a four-chambered heart.

69. **(c)** (A)
Explanation: Sea Lily is an echinoderm having spine all over the body. Blue-green algae is a class of bacteria. Maidenhair tree is pteridophytes and the sea horse is not related to the dolphin.

70. **(d)** In cockroaches and prawns excretion of waste material occurs through malpighian tubules.
Explanation: In cockroaches excretion of waste material occurs through malpighian tubules.but in prawn it occurs through green glands.

71. **(d)** Fasciola is a pseudocoelomate animal.

Explanation: Fasciola is a pseudocoelomate animal, is an incorrect statement as it does not possess any body cavity. Hence, they are acoelomate.

72.

(d) Euspongia and phylum Porifera

Explanation: The animal is identified as Euspongia which belong to phylum Porifera.

73.

(c) Round worm

Explanation: In some animals, the body cavity is not lined by mesoderm, instead, the mesoderm is present as scattered pouches in between the ectoderm and endoderm. Such a body cavity is called pseudocoelom and the animals possessing them are called pseudocoelomates, e.g.,aschelminthes such as round worm.

74. **(a)** Octopus and phylum Mollusca

Explanation: The animal is dentified as octopus which belongs to phylum Mollusca.

75.

(c) Earthworm

Explanation: Earthworm belongs to phylum Annelida whereas all other worms belong to phylum Aschelminthes.