

MISSION M.B.B.S

Date: 15/08/2022

Subject: ZOOLOGY

Topic : ANIMAL KINGDOM L9

Class: Standard XI

Instructions:

A

1. Which among the following statements is incorrect about mammals?

1. External ears or pinnae are present in all mammals without exception
2. Teeth are present in sockets
3. The most advanced mammals are the primates
4. All mammals are not viviparous

- ☒ A. Only 1
- ☐ B. Both 1 and 2
- ☐ C. Both 1 and 4
- ☐ D. Only 4

External ear (pinna) is not present in all mammals. It is absent in egg-laying mammals.

The presence of teeth in the sockets of the jawbone is a characteristic seen in all mammals.

The most advanced mammals are the primates. Primates include monkeys, apes and humans. Primates have a well developed brain and improved vision.

All mammals are not viviparous. The duck-billed platypus is an oviparous mammal or an egg-laying mammal.

In viviparity, eggs are developed inside the reproductive tract of females where the development takes place and young ones are born.

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2. The feathers in birds

- ☐ A. are modified forelimbs
- ☐ B. help in flight
- ☐ C. provide insulation
- ☒ D. both b and c

Feathers form the outer covering of birds. They are formed from the epidermal layer. Feathers are thought to have evolved from the scales of reptiles. They help in flight, provide insulation and also give protection. The forelimbs in birds are modified into wings.



3. _____ are homeotherms.

- ☐ A. Aves and reptiles
- ☐ B. Aves and amphibians
- ☒ C. Aves and mammals
- ☐ D. Mammals and reptiles

Aves and mammals are homeotherms. Homeotherms are warm-blooded animals. They are able to maintain constant body temperature. Fishes, amphibians and reptiles are poikilotherms or cold-blooded animals. They cannot maintain constant body temperature.

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4. Identify the incorrect statements from the following.
- I. Oviparous mammals do not have mammary glands
 - II. The skin in mammals is dry without any glands
 - III. Homodont dentition is seen in mammals
 - IV. Pinna is a characteristic feature of mammals

☒ A. I, II & III

☐ B. II & III

☐ C. I & IV

☐ D. II & IV

The incorrect statements are I, II and III.

Oviparous mammals lay eggs and have mammary glands to nourish young ones. Eg: Platypus.

The skin in mammals is provided with sweat glands and sebaceous glands. The sebaceous glands secrete an oily secretion called sebum that keeps the skin moist.

Heterodont dentition means having different types of teeth. This is a feature of mammals. The different types of teeth of mammals include incisors, canines, premolars and molars.

Statement IV is correct. The presence of pinna is the characteristic feature of mammals.

5. The mammals and birds are placed in the subphylum:

☐ A. Chordata

☒ B. Vertebrata

☐ C. Gnathostomata

☐ D. Tetrapoda

The mammals and birds belong to phylum Chordata, subphylum Vertebrata, division Gnathostomata and superclass Tetrapoda.

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6. Among which of the following animals do we see the presence of a gizzard?

- ☒ A. Birds and roundworms
- ☒ B. Birds and snakes
- ☒ C. Birds, earthworm and cockroach
- ☒ D. Earthworm and sponges

The gizzard is a part of the digestive system in many organisms which function as a grinding mill. It is present in the alimentary canal where it helps to grind the food to fine particles. It is present in birds, earthworms and cockroaches.



7. Pneumatic bones are found in

- ☒ A. reptiles
- ☒ B. amphibians
- ☒ C. birds
- ☒ D. fishes

Pneumatic bones are hollow bones filled with air, found in Aves or birds. It makes the skeleton light in weight, which makes it easy to fly.

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8. Which among the following features is a difference between birds and mammals?

- ☐ A. Maintenance of constant body temperature.
- ☒ B. Viviparity.
- ☐ C. Four chambered heart.
- ☐ D. Lungs for gaseous exchange .

The birds are oviparous as they lay eggs. The majority of the mammals are viviparous as they give birth to young ones.

The birds and mammals are homeotherms (warm-blooded) and maintain constant body temperature. Both have a four-chambered heart with two auricles and two ventricles. They also have lungs for respiration.

9. Which among the following is an oviparous mammal?

- ☐ A. *Macropus*
- ☒ B. *Ornithorhynchus*
- ☐ C. *Delphinus*
- ☐ D. *Equus*

Majority of mammals are viviparous and give birth to young ones. But there are a few exceptions. These are the egg-laying mammals. They are oviparous and lay eggs.

Eg: *Ornithorhynchus* (Platypus).

Macropus is Kangaroo. *Delphinus* is the common dolphin. *Equus* is the genus of horse and donkey.

Macropus, *Delphinus*, *Equus* are viviparous and give birth to young ones.

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10. The birds differ from reptiles in

- ☐ A. having scales on the skin
- ☒ B. having the ability to regulate body temperature
- ☐ C. being oviparous
- ☐ D. being vertebrates

Reptiles are cold-blooded (poikilotherms) animals and cannot regulate body temperature.

Birds are warm-blooded animals and maintain constant body temperature.

Both birds and reptiles have scales on the skin. The reptiles have scales all over the body but in birds, it is confined generally to hind limbs.

Both reptiles and birds are oviparous and lay eggs.

The vertebrates include fishes, amphibians, reptiles, aves and mammals.