

GOVERNMENT ZIRTIRI RESIDENTIAL SCIENCE COLLEGE

Subject : Zoology
Paper name : Chordate Biology & Anatomy
Paper No : ZL-II
Semester : Second

A. Multiple choice questions:

1. Chondrichthyes are characterized by
 - a) long tail
 - b) presence of notochord
 - c) cartilaginous skeleton
 - d) lateral line system
2. Member of Mammalia that does not have nipples
 - a) *Echidna*
 - b) Horse
 - c) Kangaroo
 - d) Elephant
3. Circulation is peculiar and unique in *Herdmania*, because it is
 - a) open
 - b) closed
 - c) two hearts
 - d) alternatively reversed
4. Protochordata are unique in that
 - a) they are all sedentary animals
 - b) notochord is reduced
 - c) they exhibit aerial respiration
 - d) they show sexual dimorphism
5. Early cleavage in *Amphioxus* is
 - a) incomplete
 - b) complete and meroblastic
 - c) complete and holoblastic
 - d) None of the above
6. Which type of scale is found in the Crossopterygii?
 - a) cosmoid
 - b) ganoid
 - c) placoid
 - d) cycloid
7. An example of potamodromous fishes is
 - a) gobies
 - b) herrings

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- c) carps and trouts
 - d) mackerel
8. Neoteny occurs due to lack of
- a) iodine and TSH
 - b) LH
 - c) GH
 - d) FSH
9. In *Scoliodon* the internal ear acts as
- a) organs of hearing
 - b) controls orientation and equilibrium with regard to gravity (balance)
 - c) thermoreceptor
 - d) rheoreceptor
10. The process of respiration in frog follows the order
- a) internal respiration → external respiration → transport of gases
 - b) external respiration → internal respiration → transport of gases
 - c) external respiration → transport of gases → internal respiration
 - d) internal respiration → transport of gases → external respiration
11. The exoskeleton of pigeon is derived from
- a) epidermis
 - b) dermis
 - c) exodermis
 - d) endodermis
12. Snake venom consists mainly of
- a) lipids
 - b) proteins
 - c) sugars
 - d) None of the above
13. The bone that holds the fangs of the snake is
- a) maxilla
 - b) mandible
 - c) pterogoid
 - d) None of the above
14. A contour feather typically consists of
- a) central axis
 - b) outer web
 - c) inner web
 - d) rachis
15. The pigeon flies on the principle of
- a) indirect movement

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- b) direct movement
 - c) displacement movement
 - d) airflow
16. The sweat glands in humans are called
- a) sebaceous glands
 - b) stratum corneum
 - c) sudiferous glands
 - d) None of the above
17. Which of the following is known as the “jack of all trades” of vertebrates?
- a) urinogenital system
 - b) digestive system
 - c) integumentary system
 - d) respiratory system
18. The receptor that detects chemicals in gaseous state is called
- a) gustoreceptor
 - b) olfactoreceptor
 - c) tangoreceptor
 - d) rheoreceptor
19. The length of alimentary canal is maximum in
- a) carnivores
 - b) herbivores
 - c) omnivores
 - d) detritivores
20. Three-chambered heart is found in
- a) *Scoliodon*
 - b) frog
 - c) Turtle
 - d) Crocodile
21. Oxyhaemoglobin is represented by the formula
- a) HbO_2
 - b) H_2bO_2
 - c) $2 \text{H}_2\text{bO}_2$
 - d) 2HbO_2
22. Functional unit of lungs is
- a) neuron
 - b) bronchioles
 - c) pulmonary veins
 - d) alveoli

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23. The first process occurring in the respiratory organs is called
- a) breathing
 - b) oxygen
 - c) homeostasis
 - d) carbon dioxide
24. The appendages that serve for gaseous exchange through the medium of water are
- a) lungs
 - b) ventilated lungs
 - c) gills
 - d) modified lungs
25. Yellow elastin fibres are found in which of the following
- a) calcified cartilage
 - b) elastic cartilage
 - c) fibrous cartilage
 - d) normal cartilage

B. Fill in the blanks:

1. Chordates having the skull are grouped as _____ .
2. In Aves the forelimbs are modified for _____ .
3. The three primary germ layers are established in _____ .
4. Type of migration involving the search of food and water is called _____.
5. Respiration through skin is called _____.
6. Inspiration is immediately followed by another process called _____.
7. The scapus is divided into calamus and _____ .
8. The quill feathers from the general body covering are called _____ .
9. Shedding and replacement of feather is called _____ .
10. The three- and four-chambered hearts in vertebrates have _____ circulation.
11. The outermost epithelial layer of the integument in vertebrates is known as _____.
12. Lateral line receptor system is the characteristic of group _____ in vertebrates.
13. The outermost layer of the mammalian tooth consists of _____ .
14. Haemoglobin is a _____ coloured pigment.
15. Each group of vessels in compact bones constitute a _____ canal

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Answer Key

A. Multiple choice questions

- | | | | | | | |
|---------|---------|---------|---------|---------|---------|---------|
| 1. (c) | 2. (a) | 3. (d) | 4. (b) | 5. (c) | 6. (b) | 7. (c) |
| 8. (a) | 9. (b) | 10. (c) | 11. (a) | 12. (b) | 13. (b) | 14. (a) |
| 15. (a) | 16. (c) | 17. (c) | 18. (b) | 19. (b) | 20. (b) | 21. (a) |
| 22. (d) | 23. (a) | 24. (c) | 25. (b) | | | |

B. Fill in the blanks

1. Craniata
2. flying
3. gastrula
4. alimental
5. cutaneous
6. expiration
7. shaft
8. contours
9. moulting
10. double
11. stratum corneum
12. Pisces
13. enamel
14. red
15. Haversian