

## GOVERNMENT ZIRTIRI RESIDENTIAL SCIENCE COLLEGE

**Subject** : Zoology  
**Paper name** : Chordate Biology and Anatomy  
**Paper No** : ZL III  
**Semester** : 2<sup>nd</sup>

A. Multiple choice questions [25 (5 from each unit)]

1. Who described the Phylum Chordata in 1880?
  - a) Charles Darwin
  - b) Linnaeus
  - c) Aristotle
  - d) Balfour
2. What is the secondary cavity formed during gastrulation in *Branchiostoma*?
  - a) Blastocoel
  - b) Archenteron
  - c) Morula
  - d) Neurula
3. What is the elongated sac that encloses the heart of *Herdmania*?
  - a) Pericardium
  - b) Cloacal bladder
  - c) Aorta
  - d) External valve
4. Class Mammalia belongs to which Superclass?
  - a) Acraniata
  - b) Agnatha
  - c) Gnathostomata
  - d) Urochordata
5. What is ball-like structure formed after the sixth cleavage in *Brachiostoma*?
  - a) Morula
  - b) Micromeres
  - c) Megameres
  - d) Blastula
6. What is the type of scale found in fossil fishes?
  - a) Placoid
  - b) Cosmoid
  - c) Ganoid
  - d) Cycloid
7. What is the migration of fish from fresh water to ocean?
  - a) Amphidromy
  - b) Anadromy

## GOVERNMENT ZIRTIRI RESIDENTIAL SCIENCE COLLEGE

- c) Catadromy
  - d) Potamodromy
8. Which organism has Ampullae of Lorenzini?
- a) *Branchiostoma*
  - b) *Rana tigrina*
  - c) *Herdmania*
  - d) *Scoliodon*
9. Which organism frequently exhibits neoteny?
- a) *Pan sp.*
  - b) *Ambystoma sp.*
  - c) *Panthera sp.*
  - d) *Sus sp.*
10. What is organ involved in cutaneous respiration?
- a) Heart
  - b) Lungs
  - c) Skin
  - d) Liver
11. What gland is modifies in snakes to form the poison gland?
- a) Parotid gland
  - b) Pituitary gland
  - c) Pineal gland
  - d) Thyroid gland
12. What snake produces hematoxic venom?
- a) Cobra
  - b) Sea snake
  - c) Viper
  - d) King Cobra
13. What is the connecting link between birds and reptiles?
- a) *Canis familiaris*
  - b) *Homo neanderthalensis*
  - c) *Passer domesticus*
  - d) *Archaeopteryx lithographica*
14. What is the arrangement of feather on the body of birds?
- a) Apteria
  - b) Pterylosis
  - c) Quadrate
  - d) Pterygoid
15. What is muscle responsible for down stroke in birds?
- a) Pelvic major

## GOVERNMENT ZIRTIRI RESIDENTIAL SCIENCE COLLEGE

- b) Pelvic minor
  - c) Pectoralis major
  - d) Pectoralis minor
16. What is the membrane that covers the brain?
- a) Meninges
  - b) Sylvian
  - c) Pericardium
  - d) Cerebellum
17. What cells of the eye are associated with the perception of color?
- a) Gangliocytes
  - b) Hepatocytes
  - c) Rods
  - d) Cones
18. Where does digestion of fats occur?
- a) Esophagus
  - b) Stomach
  - c) Small intestine
  - d) Large intestine
19. What receptor is related to the sense of taste?
- a) Gustatoreceptor
  - b) Tangoreceptor
  - c) Olfactoreceptor
  - d) Photorecpetor
20. Which of the following is a modified integument?
- a) Kidney
  - b) Tongue
  - c) Teeth
  - d) Hair
21. What is the most common type of cartilage?
- a) White fibrous
  - b) Yellow elastic
  - c) Hyaline
  - d) Semi-elastic
22. How many chambers are present in the heart of humans?
- a) One
  - b) Two
  - c) Three
  - d) Four
23. A typical mammalian dentition has how many teeth?

## GOVERNMENT ZIRTIRI RESIDENTIAL SCIENCE COLLEGE

- a) 42
- b) 43
- c) 44
- d) 45

24. What is the type of collagen found in bones?

- a) Ossite
- b) Ossein
- c) Portin
- d) Glucon

25. What is the study of ligaments?

- a) Osteology
- b) Ornithology
- c) Cosmology
- d) Desmology

B. Fill up the blanks [15 (3 from each unit)]

1. Members of the Phylum Chordata has gill slit, nerve cord and \_\_\_\_\_.
2. Fertilization in *Branchiostoma* is \_\_\_\_\_ fertilization.
3. The heart of *Herdmania* is \_\_\_\_\_ chambered.
4. Fish migration for the purpose of reproduction is \_\_\_\_\_ migration.
5. Contraction of \_\_\_\_\_ aids in swimming in fishes.
6. The bone that helps in buccal respiration of frog is \_\_\_\_\_ apparatus.
7. The pH of snake venom is slightly \_\_\_\_\_.
8. Wing quills are covered by upper and lower feathers called \_\_\_\_\_.
9. Flight in birds depends on \_\_\_\_\_ law.
10. The receptor that receives light is \_\_\_\_\_.
11. The vitreous chamber of the eye is filled with \_\_\_\_\_.
12. The outer part of the brain is called \_\_\_\_\_.
13. Ligaments connect bones to \_\_\_\_\_.
14. Milk teeth is also called \_\_\_\_\_.
15. Deoxygenated blood is carried by \_\_\_\_\_.

### Key Answers

A. Multiple choice questions [replace x]

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

B. Fill up the blanks [replace x]

1. Notochord

## **GOVERNMENT ZIRTIRI RESIDENTIAL SCIENCE COLLEGE**

2. External
3. Single
4. Gametic
5. Myomeres
6. Hyoid
7. Acidic
8. Coverts
9. Bernoulli's
10. Photoreceptor
11. Vitreous humour
12. Cortex
13. Bones
14. Deciduous/Lacteal
15. Veins