

B.Sc. ZOOLOGY
SECOND SEMESTER (REPEAT)
BIOLOGY OF CHORDATES
BSZ-201

SET
A

[USE OMR FOR OBJECTIVE PART]

Duration: 3 hrs.

Full Marks: 70

Time: 30 min.

(Objective)

Marks: 20

Choose the correct answer from the following:

1X20=20

1. Which of the following skull types is characterized by a solid skull roof, lacking temporal fenestrae (openings)?
 - a. Diapsid
 - b. Anapsid
 - c. Synapsid
 - d. Euryapsid
2. Which of the following bone types is the characteristic of birds and reduces their overall weight?
 - a. Pneumatic (hollow) bones
 - b. Dense, solid bones
 - c. Fibrous bones
 - d. Cartilaginous bones
3. The arrangement of teeth in the upper and lower half of the jaws is represented by
 - a. Dentology
 - b. Odontology
 - c. Enamel
 - d. Dental formula
4. The fertilization in all three Protochordates is
 - a. Internal
 - b. External
 - c. Both internal and external
 - d. None of the above
5. Which of the following is the connecting link between birds and reptiles?
 - a. Ostrich
 - b. Pigeon
 - c. Archeopteryx
 - d. None
6. Poison gland of snake is the modification of
 - a. Sebaceous gland
 - b. Salivary gland
 - c. Endocrine gland
 - d. All of these
7. Notochord is confined to proboscis in
 - a. Urochordata
 - b. Hemichordata
 - c. Chordata
 - d. Cephalochordata
8. Larval form of hemichordata
 - a. Tornaria
 - b. Nauplius
 - c. Amphiblastula
 - d. Bipinnaria

9. The collar of *Balanoglossus* resembles with the
 - a. Prostomium of earthworm
 - b. Proboscis of earthworm
 - c. Proboscis of *Hermania*
 - d. Clitellum of earthworm
10. Respiratory pigment in vertebrates is
 - a. Haemocyanin
 - b. Chloroquin
 - c. Heparin
 - d. None of the above
11. In deuterostomes, blastopore forms
 - a. The mouth
 - b. Brain
 - c. The anus
 - d. Kidney
12. Post anal tail is present in
 - a. Urochordates
 - b. Cephalochordates
 - c. Hemichordates
 - d. All protochordates
13. Name the animal group whose members are are considered doubtful chordates.
 - a. Urochordata
 - b. Hemichordata
 - c. Cephalochordata
 - d. All of the above
14. The term vertebrate is synonymous to
 - a. Protochordata
 - b. Chordata
 - c. Craniata
 - d. Urochordata
15. *Herdmania* is the organism that are
 - a. Oviparous
 - b. Viviparous
 - c. Ovo-viviparous
 - d. None of the above
16. The body of cyclostomes is
 - a. Laterally flattened and segmented
 - b. Dorsoventrally flattened and jointed
 - c. Elongated, cylindrical, and without scales
 - d. Covered with exoskeleton
17. Placoderms are believed to be among the first vertebrates to
 - a. Possess lungs
 - b. Develop true jaws
 - c. Evolve into amphibians
 - d. Show amniotic eggs
18. Cartilaginous fishes respire through-
 - a. Lungs
 - b. Skin
 - c. Gills without operculum
 - d. Gills with operculum
19. Most bony fishes regulate buoyancy using a-
 - a. Oily liver
 - b. Lateral line
 - c. Kidney
 - d. Swim bladder

20. In catadromous migration, fishes-

- a. Migration from freshwater to sea to spawn
- b. Remain in freshwater throughout life
- c. Migrate from sea to freshwater to spawn
- d. Migrate only for feeding

[Descriptive]

Time : 2 hrs. 30 min.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

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| 1. Give an account of the general features of the egg laying mammals. | 10 |
| 2. Describe the morphological and anatomical adaptations of flight in bird. | 7+3=10 |
| 3. Write a note on general features and classification of Protochordata. | 10 |
| 4. Explain the three fundamental chordates characteristics with a suitable diagram. | 10 |
| 5. Give an account on the primitive and specialized characters of Cephalochordata. | 5+5=10 |
| 6. What is vertebrate? Give an account of the general characteristics of subphylum vertebrata. | 2+8=10 |
| 7. Write an account on the biological significance of Ostracodermi and Placodermi. | 5+5=10 |
| 8. Describe the major differences between Chondrichthyes and Osteichthyes with examples. | 10 |

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