

( PART-B : Descriptive )

Time: 2 hrs. 40 min.

Marks: 50

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

1. Write the general features of *Branchiostoma*. What are the three fundamental chordate characters? 7+3=10
2. Write note on the process of retrogressive metamorphosis 10
3. Give a general account of Dipnoi and discuss their amphibian affinities. Draw a comparison between Chondrichthyes and Osteichthyes in a tabular form. 4+6=10
4. Describe the different types of skull found in Reptiles with suitable diagrams. 10
5. Describe the anatomical peculiarities of *Sphenodon* with justification of its systematic position. 10
6. What are marsupials? What are their chief differences from Eutheria? Give any two peculiar characters of Prototheria. 2+6+2=10
7. How do the birds navigate and orient during migration? What are the different types of migration found in birds? What are resident birds? 5+4+1=10
8. What is Neo-Darwinism? Explain the main elements of this theory? 3+7=10

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REV-00  
BSZ/R/03/08

2018/06

**B.Sc. ZOOLOGY**  
**SECOND SEMESTER (REPEAT)**  
**CHORDATE DIVERSITY, COMPARATIVE ANATOMY & EVOLUTION**  
**BSZ-201**

(Use separate answer scripts for Objective & Descriptive)

Duration: 3 hrs.

Full Marks: 70

( PART-A : Objective )

Time: 20 min.

Marks: 20

Choose the correct answer from the following:

1X20=20

1. Chordata characters disappear in the adult form of
  - a. *Herdmania*
  - b. *Petromyzon*
  - c. *Myzine*
  - d. None of the above
2. Which of the following is a feature of *Herdmania*
  - a. Notochord only in larval tail
  - b. Notochord in adult form
  - c. Notochord is absent
  - d. All of the above
3. Tunicates are
  - a. Hemichordata
  - b. Cephalochordata
  - c. Urochordata
  - d. None of the above
4. *Amphioxus* belongs to
  - a. Urochordata
  - b. Cephalochordata
  - c. Vertebrata
  - d. None of the above
5. Skull is present in
  - a. Vertebrata
  - b. Cephalochordata
  - c. Urochordata
  - d. None of the above
6. Acorn worms belong to Class
  - a. Enteropneusta
  - b. Plactosphoroidea
  - c. Pterobranchia
  - d. None of the above
7. Scales in Chondrichthyes are
  - a. Cosmoid

- b. Placoid
  - c. Ganoid
  - d. Ctenoid
8. The function of crop is
- a. To produce enzyme
  - b. To store food
  - c. To digest the food
  - d. To absorb the food
9. Neotany is found in the larva of
- a. *Hylarana*
  - b. *Salamandra*
  - c. *Ichthyophis*
  - d. *Necturus*
10. Persistence of larval characters is known as
- a. Neogenesis
  - b. Paedogenesis
  - c. Parthenogenesis
  - d. Paedomorphosis
11. Copulatory organs are absent in
- a. Gecko
  - b. Sphenodon
  - c. Snake
  - d. Tortoise
12. Skin of lizard contains
- a. Horny scales
  - b. Horny scutes
  - c. Plates
  - d. All the above
13. Interclavicle in reptile is
- a. H shaped
  - b. W shaped
  - c. T shaped
  - d. A shaped
14. Embryonic membranes present in reptiles are
- a. Amnion and Chorion
  - b. Chorion and yolk sac
  - c. Yolk sac and allantois
  - d. Amnion, chorion, yolk sac and allantois
15. Which of following is an elevator flight muscle in flying birds
- a. Pectoralis major
  - b. Pectoralis minor
  - c. Pronator muscles
  - d. All of the above

16. Mammals which have true placenta are called
- a. Prototheria
  - b. Metatheria
  - c. Eutheria
  - d. None of the above
17. Diastema can be defined as
- a. Structure of mammalian eye
  - b. Part of pelvic girdle
  - c. Space in between the teeth due to absence of canine
  - d. Type of teeth in mammals
18. Which of the following is the largest group of mammals
- a. Rodentia
  - b. Chiroptera
  - c. Carnivora
  - d. Insectivore
19. The moth studied in industrial melanism is
- a. Peppered Moth
  - b. Black Moth
  - c. Brown Moth
  - d. Blue Moth
20. Along with Darwin, the theory of natural selection was also put forward by
- a. Wallace
  - b. Odum
  - c. Lamarck
  - d. None of the above

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