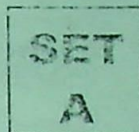202 : 07

B.Sc. ZOOLOGY
FOURTH SEMESTER [SPECIAL REPEAT]
COMPARATIVE ANATOMY OF VERTEBRATE
BSZ-401
[USE OMR SHEET FOR OBJECTIVE PART]

SET

A

Duration: 3 hrs.

Full Marks: 70

[**Objective**]

Time: 30 mins.

Marks: 20

Choose the correct answer from the following:

1×20=20

1. The blood transporting channel having only endothelial layer is:
   - a. Vein
   - b. Artery
   - c. Arteriols
   - d. Capillary

2. Single circuit heart is:
   - a. Oxygenated and deoxygenated blood mixed with each other
   - b. Having 2 chambers
   - c. Found in gill bearing animals
   - d. All of the above

3. The organism containing only one cuspid valve are:
   - a. Mammal
   - b. Reptiles
   - c. Bird
   - d. Amphibia

4. Bicuspid valve is also called as:
   - a. Semilunar valve
   - b. Spiral valve
   - c. Mitral valve
   - d. Having no other names

5. Incomplete interauricular septum in dipnois are called as:
   - a. Foramen ovale
   - b. Foramen of panizza
   - c. Septum bulbi
   - d. None

6. Spiral valve are found in:
   - a. Urodela
   - b. Urochordata
   - c. Anura
   - d. Reptiles

7. The main difference in avian and mammalian heart is found in:
   - a. Atrium
   - b. Ventricle
   - c. Chambers
   - d. Valves

8. The process of exchange of gases in Aves occurs in the:
   - a. Air sacs and lungs
   - b. Lungs
   - c. Air sacs
   - d. None

9. Identify the part of the respiratory system in which the exchange of gases takes place?
   - a. Trachea
   - b. Larynx
   - c. Pharynx
   - d. Alveoli

10. Out of the following, which one can be identified as the function of the trachea?
    - a. Exchange of gases
    - b. Exhaling or removal of air from our body
    - c. Filtering the air that we breathe
    - d. All of the above

1

11. The most primitive types of true kidneys are:
    a. Mesonephros
    b. Pronephros
    c. Archinephros
    d. Metanephros

12. Mesonephros develops from:
    a. Top part of the nephrostome
    b. Middle part of the nephrostome
    c. Lower part of the nephrostome
    d. None

13. The kidneys found only in amniotes are:
    a. Mesonephros
    b. Archinephros
    c. Pronephros
    d. Metanephros

14. Receptors for hearing are called as:
    a. Photo receptor
    b. Auditory receptor
    c. Olfactory receptors
    d. None

15. The vaginal canal is bifurcated in:
    a. Monotreme type of uterus
    b. Simplex uterus
    c. Duplex uterus
    d. Marsupial type of uterus

16. In bicornuate type of uterus:
    a. 2 uterus present
    b. 2 horns and 2 uterus
    c. One uterus
    d. 2 horns and 1 uterus

17. The uterus found in rodents are:
    a. Duplex
    b. Bicornuate
    c. Simplex
    d. Bipartite

18. The Y shaped uterus is:
    a. Duplex
    b. Simplex
    c. Bicornuate
    d. Bipartite

19. The uterus in human are:
    a. Duplex
    b. Simplex
    c. Bicornuate
    d. Bipartite

20. Two cervixes are found in:
    a. Monotreme uters
    b. Marsupial uterus
    c. Duplex uterus
    d. All of the above

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(Descriptive)

Time : 2 hr. 30 mins.   Marks : 50

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

1. What are the different types of kidneys? Describe their general plan   5+5=10
    with diagram. Describe about primitive ancestral vertebrate kidney
    with diagram.

2. What are receptors? Classify them and write briefly about visceral   2+2+6=10
    receptors with diagram.

3. Explain the structural significance of lungs in Amphibia and   5+5=10
    mammalia.

4. Define portal system and their types. Give difference between Single   2+8=10
    circulation and Double circulation with example and diagram.

5. Describe the basic structure of uterus. Define eutherian type of uterus   2+8=10
    with proper diagram.

6. Describe the structure of Avian and Mammalian heart. What are the   5+5=10
    differences between reptile and avian heart? Describe with proper
    diagram.

7. Describe briefly the circulatory system of vertebrate with proper   6+4=10
    labeled diagram.

8. What is autonomic nervous system? Describe briefly.   5+5=10
    Write briefly about spinal cord of mammal.

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