REV-01 BSZ/06/11

B.Sc. ZOOLOGY FOURTH SEMESTER (REPEAT) COMPARATIVE ANATOMY OF VERTEBRATES BSZ-401

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs.

Time: 30 mins.

Objective)

Full Marks: 70

2023/06

SET

Marks: 20

 $1 \times 20 = 20$

Choose the correct answer from the following:

1. The blood transporting channel having only endothelial layer is: a. Vein c. Arteriols

b. Artery

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 c. Bird

b. Reptiles 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

The main difference in avian and mammalian heart is found in:

a. Atrium

b. Ventricle

c. Chambers

d. Valves

The process of exchange of gases in Aves occurs in the:

a. Air sacs and lungs

b. Lungs

c. Air sacs

d. None

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

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11.	The most primitive types of true kidneys a. Mesonephros c. Archinephros	b	o. Pronephros I. Metanephros
12.	Mesonephros develops from: a. Top part of the nephrostome c. Lower part of the nephrostome	b	 Middle part of the nephrostome None
	The kidneys found only in amniotes are: a. Mesonephrosc. Pronephros		ArchinephrosMetanephros
14.	Receptors for hearing are called as: a. Photo receptorc. Olfactory receptors	b.	Auditory receptor None
15.	The vaginal canal is bifurcated in: a. Monotreme type of uterus c. Duplex uterus	b. d.	Simplex uterus Marsupial type of uterus
	In bicornuate type of uterus: a. 2 uterus present c. One uterus	b.	2 horns and 2 uterus 2 horns and 1 uterus
	The uterus found in rodents are: a. Duplex c. Simplex		Bicornuate Bipartite
	The Y shaped uterus is: a. Duplex c. Bicornuate	b.	Simplex Bipartite
	The uterus in human are: a. Duplex c. Bicornuate	b.	Simplex Bipartite
	Fwo cervixes are found in: a. Monotreme uters c. Duplex uterus	b.	Marsupial uterus All of the above

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(<u>Descriptive</u>)

Tim	e: 2 hr. 30 mins.	Marks: 50
	[Answer question no.1 & any four (4) from the rest]	
1.	Describe briefly the circulatory system of vertebrate with proper labeled diagram.	6+4=10
2.	Describe the structure of Avian and Mammalian heart. What are the differences between reptile and avian heart? Describe with proper diagram.	5+5=10
3.	Explain the structural significance of lungs in Amphibia and mammalia.	5+5=10
4.	Define portal system and their types. Give difference between Single circulation and double circulation with example and diagram.	2+8=10
5.	Describe the basic structure of uterus. Define eutherian type of uterus with proper diagram.	2+8=10
6.	What are the different types of kidneys? Describe their general plan with diagram. Describe about primitive ancestral vertebrate kidney with diagram.	5+5=10
7.	What are receptors? Classify them and write briefly about visceral receptors with diagram.	2+2+6=10
8.	What is autonomic nervous system? Describe briefly. Write briefly about spinal cord of mammal.	5+5=10

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