#### 2022

### B.A./B.Sc. Fourth Semester

### CORE – 8

#### ZOOLOGY

### *Course Code: ZOC 4.11* (Comparative Anatomy of Vertebrates)

Total Mark: 70 Time: 3 hours Pass Mark: 28

Answer five questions, taking one from each unit.

#### UNIT-I

1.	(a)	Explain the structure of integument of mammals with neat labelled	
		diagram.	7
	(b)	Describe the important functions of integument with examples.	7

2. What is appendicular skeleton? Give a comparative account of the bones in the forelimbs of frog, reptiles and aves. 2+12=14

#### UNIT-II

- 3. Write notes on the following:  $7 \times 2 = 14$ 
  - (a) Dentition
  - (b) Alimentary glands and associated glands
- 4. Give a comparative anatomy of lungs and air sacs of vertebrates. 14

#### UNIT-III

5. What are aortic arches? Explain the evolution of aortic arches in elasmobranch and amphibian.

14

6. Explain the succession of kidneys in vertebrates.

# UNIT-IV

14

7.	Give a comparative account of brain in reptiles, aves and mammals.	14
8.	<ul><li>(a) Describe the parasympathetic nervous system with diagram.</li><li>(b) Explain the cranial nerves in mammals.</li></ul>	7 7

# UNIT-V

9.	What are receptors? Explain the classification of receptors with		
	examples.	14	
10.	Write notes on the following: (a) Audio receptor in man	7×2=14	
	(b) Vision in man		