

B.SC. ZOOLOGY 4TH SEMESTER SESSIONAL EXAMINATION, 2023
PAPER NAME: COMPARATIVE ANATOMY OF VERTEBRATES
PAPER CODE: ZOO-HC-4016

Marks=30

Time=1 Hr

Q1. Fill in the blanks:

1x5=5

- a) Teleost have _____ pair of aortic arches.
- b) Embryos of all vertebrates have _____ type of kidneys.
- c) Third ventricle is connected with the fourth ventricle of brain by _____.
- d) The horn of rhinoceros is a modified _____.
- e) Bowman's capsule and glomerulus together form the _____.

Q2. Define the following terms:

1x5=5

- a.) Proprioceptors
- b.) Ductus caroticus
- c.) Uropygial gland
- d.) Axial skeleton
- e.) Swim Bladder

Q3. Write short notes on (any four):

2.5x4=10

- a.) Ruminant Stomach
- b.) Transitional heart
- c.) Embryonic structure of Visceral arches
- d.) Epidermal derivatives of integument
- e.) Mammalian brain

Q4. Answer the following (any one):

1x10=10

- a) Compare the aortic arches in fishes, amphibians and mammals.
- b) Discuss the evolution of three-chambered heart in amphibians to four chambered heart in birds with supporting diagram.
- c) Discuss the succession of kidneys in vertebrates with labelled diagrams.