

**CARMEL COLLEGE OF ARTS, SCIENCE & COMMERCE FOR WOMEN
NUVEM-GOA**

SEMESTER END EXAMINATION, NOVEMBER- DECEMBER 2022

Semester: III Course code & name: ZOC 103 Anatomy of Animal Body Systems

Total Marks: 80 Date: 17.11.2022 Duration: 02 hours Total No. of Pages: 02

Instructions: 1. All questions are compulsory.

2. Figures to the right indicate marks allotted to the question.

3. Illustrate your answers wherever necessary.

Q.I. Answer ANY FOUR of the following: (4x4=16)

- i. Submit a concise account of 'Leptoid' scales.
- ii. Describe and draw the 'Autodiastylic' jaw suspension.
- iii. Discuss in brief the embryonic components of the skull in bony fish.
- iv. Describe the ruminant stomach.
- v. Differentiate between 'Polyphyodont' and 'Diphyodont' dentition.
- vi. Differentiate between the gills of bony and cartilaginous fish.

Q. II. Answer ANY FOUR of the following: (4x4=16)

- a. Describe the two-chambered heart.
- b. Discuss the aortic arches present in 'Aves'.
- c. Write a note on 'Archinephros'.
- d. Draw and explain the structure of a neuron.
- e. Explain in brief the organ of Jacobson in Vertebrates.
- f. With an illustration explain the role of the Lateral Line System.

Q. III A. Discuss of integument of Reptilia (6)

Or

- A. Give an account of digital tips in Vertebrates. (6)
- B. Enlist the functions of the integument. (6)

Q IV A. With appropriate diagrams explain the visceral skeleton in tetrapods. (6)

OR

A. With appropriate diagrams explain the limb postures in tetrapods. (6)

B. Discuss 'Heterodont dentition' in mammals. Add a note on 'dental formula'. (6)

Q. V. A. Discuss the Accessory respiratory organs in Vertebrates. (6)

OR

A. With an illustration explain the lung formation in Vertebrates (6)

B. Describe the stages in development of heart in a Vertebrate embryo. (6)

Q VI. A. Discuss the urinary bladder of Vertebrates. (6)

OR

A. Trace the fate of pronephros, mesonephros and metanephros in Vertebrates. (6)

B. Discuss the Autonomic Nervous system in Vertebrates. (6)

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