

**B.Sc. 4<sup>th</sup> Semester (Honours) Examination, 2021**  
**Subject: ZOOLOGY**

**Course ID: 42611**

**Course Code: SH/ZOO /401/C-8**

**Course Title: Comparative Anatomy of Vertebrates**

**Full Marks: 25**

**Time: 1 Hr 15 Min**

*The figures in the right hand margin indicate full marks.  
Candidates are required to give their answers in their own words.*

**UNIT-I**

**1. Answer any five of the following questions: (1×5 = 5)**

- a) Write the name of toothless mammalian species.
- b) What is branchiostegal membrane?
- c) What is deltoid ridge?
- d) Why hair and nail are called dead cell?
- e) What do you mean by third ventricle
- f) What is ductus Botalli?
- g) Why bulbus arteriosus is not considered as part of heart?
- h) Name the amphibian species in which gill is retained throughout the life.

**UNIT-II**

**2. Answer any two of the following questions: (5X2 = 10)**

- a) Describe the holobranchian gill with suitable diagram. How the gills of Chondrichthyes differ from that of Osteichthyes? 3+2=5
- b) What do you mean by craniostylic and autostylic jaw suspension? Give example. (2+2+1= 5)
- c) Draw and describe dentition in mammals according to the attachment with gum. 5
- d) Discuss with suitable illustration various types of uteri found in mammals. 5

### UNIT-III

3. Answer *any one* of the following questions:

(10×1 = 10)

a) Describe different kinds of epidermal glands on the basis their mode of secretion with suitable examples. Describe sebaceous gland and sudoriferous glands with illustration. State the difference between horns of deer and antelope. 3+5+2= 10

b) Comment on the modification observed in reptilian heart over amphibian heart. State the functional and evolutionary significance of modification of aortic arches in mammal. What is Ductus caroticus? State its significance? 4+4+1+1=10