

2020
Gurudas College
ZOOLOGY – HONOURS
Paper: CC- 8 TH
Full Marks: 60

Time: 2 hrs. 30 mins.

Part A

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer **any twenty five** questions from the following:

2x25

1. What do you mean by Ductus caroticus?
2. Distinguish between Aortic arches of birds and mammals.
3. Define double circuit heart.
4. Why piscian heart is called venous heart?
5. What is synsacrum?
6. What do you mean by craniostylic jaw suspension?
7. Mention the fate of foramen ovale in adult heart.
8. Mention two characteristics of anuran aortic arches.
9. What do you mean by pygostyle.
10. What is bulbus aorta? Write its function.
11. Write the differences between stomach of cow and camel.
12. Differentiate between Hemibranch & Holobranch.
13. Write the role of Air sacs in birds.
14. What is head kidney?
15. Archinephros type of kidney is found in which group?
16. From which part of nephrogenic mesoderm metanephric type of kidney is developed?
17. What is clasper?
18. What do you mean by opisthonephric kidney?
19. In which part of the lungs the gaseous exchange is occurred?
20. What is corpus callosum?
21. Write the names of the different parts of the forebrain?
22. What do you mean by chemoreceptor?
23. Write a short note on Cochlear Duct.
24. Write a note on the chemical composition of Preen Oil.
25. What is the function of Salt Gland in birds?
26. State the function of Sebum.
27. What are the two principal types of secretory cells present in the mucous glands of amphibian skin?
28. How many types of sweat glands are found in mammals? State their names.
29. Name two alkaloids with antimicrobial properties found in the cutaneous secretion of amphibians.
30. “Mammalian teeth are Thecodont, Diphyodont and Heterodont” – Explain.
31. What is Diastema? Where is it found?
32. Explain Carnassials Apparatus.
33. Give the dental formula of human with explanation.
34. Write down the water-proofing function of uropygial gland.
35. Describe hypsodont teeth with example (diagram not required).

Part B
Internal Assessment

Choose the correct alternative for *any ten* from the following:

1x10

1. Bird vertebrae are
 - a) Acoelous
 - b) Heterocoelous
 - c) Amphicoelous
 - d) Procoelous

2. In adult Sting ray number of aortic arches is
 - a) 4 pairs
 - b) 3 pairs
 - c) 6 pairs
 - d) No one above

3. The following portion is called Ductus Arteriosus -
 - a) Portion of dorsal aorta between third and fourth aortic arches
 - b) Distal part of sixth aortic arch between dorsal aorta and the pulmonary artery
 - c) Part of fifth aortic arches connected to the pulmonary artery
 - d) No one above

4. The following compartment is the largest in ruminant stomach of cow -
 - a) omasum
 - b) abomasum
 - c) reticulum
 - d) rumen

5. The walls of the ventricles possess thick muscular projections, they are known as
 - a) Conus arteriosus
 - b) Truncus arteriosus
 - c) Chordae tendineae
 - d) Columnae carneae

6. The earwax is produced by
 - a) Ceruminous gland
 - b) Mammary gland
 - c) Ciliary gland
 - d) Sudoriporous gland

7. Apocrine sweat glands are mostly found at
 - a) Armpits and perianal area
 - b) Eyelids
 - c) Middle ears
 - d) Both eyelids and middle ears

8. Frog skin commonly contains
- Endocrine glands
 - Exocrine glands
 - Both exocrine and endocrine glands
 - Neither exocrine or endocrine glands
9. The hardest substance found in vertebrates is
- Dentine
 - Calcium carbonate
 - Cement
 - Enamel
10. Artiodactyls have
- Bunodont teeth
 - Sectorial teeth
 - Selenodont teeth
 - Baleen
11. Which of this statement is TRUE for pulmonary respiration ?
- Exchange of gases between alveoli of lungs and the blood
 - Exchange of gases between blood and tissue cells
 - Breathing between the atmosphere and the alveoli of the lungs
 - Production of ATP
12. Each kidney is made up of a large number of excretory units called
- Glomerulus
 - Bowman's Capsule
 - Nephron
 - Blood capillaries
13. Oviduct in vertebrates is modified
- Wolffian duct
 - Mullerian duct
 - Inguinal duct
 - Urinary duct
14. Ninth cranial nerve of the vertebrates is
- Vagus
 - Hypoglossal
 - Facial
 - Glossopharyngeal
15. Organ of Pecten is found in the eye of
- Fish
 - Bird
 - Snake
 - Bird