

Q.P. Code – 42243

Second Semester B.Sc. Degree Examination, September 2020

(Old – CBCS Scheme)

Zoology

**Paper II – COMPARATIVE ANATOMY AND
DEVELOPMENTAL BIOLOGY**

Time : 3 Hours]

[Max. Marks : 90

Instructions to Candidates : Draw neat labelled diagrams wherever necessary.

PART – A

I. Answer any **TEN** of the following : **(10 × 2 = 20)**

1. Mention the different types of Epidermal derivatives.
2. Name the different fins of Shark.
3. Draw a neat labelled diagram of the Pectoral girdle of Frog.
4. Compare the pancreas of Frog and Rabbit.
5. Write a note on Airsacs.
6. What are Aortic arches?
7. Write a note on Archinephros.
8. What are Meninges? Mention their names.
9. Give an account of Olfactory receptors.
10. Define Gametogenesis.
11. What is Fertilization?
12. Write a note on Implantation.

Q.P. Code – 42243

PART – B

II. Answer any **SIX** of the following : **(6 × 5 = 30)**

13. Compare the Integument of Frog and Shark.
14. Compare the Intestine of Frog and Lizard.
15. Explain the evolutionary trends in the heart of Frog and Pigeon.
16. Write a note on Metanephros.
17. Compare the brain of Frog and Lizard.
18. Explain the evolution of Ear Ossicles in Mammals.
19. Describe Neurulation in Frog.
20. What is Placenta? Give an account of yolk sac placenta.

PART – C

III. Answer any **FOUR** of the following : **(4 × 10 = 40)**

21. Compare the pectoral girdle of Pigeon and Rabbit.
22. Trace the evolutionary trends in the modification of Lungs and Swim bladder.
23. With a neat labelled diagram, explain the structure of Hen's egg.
24. Describe the process of Gastrulation in Frog.
25. Explain the metamorphic events in Frog life cycle.
26. Write notes on :
 - (a) Determination
 - (b) Differentiation