

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester B.Sc Zoology Degree Examination, April 2023

BZL4B04 – Animal Diversity – Chordata Part II

(2019 Admission onwards)

Time: 2 hours

Max. Marks : 60

Section A

I. Short answer questions. Each question carries 2 marks.

1. Mention any four examples of super order Ratita.
2. Write the scientific name of following
i). Cassowary ii) Kiwi iii) Ostrich iv) Passenger pigeon
3. Comment on the rediscovery of Jerdon's Courser
4. What is crop? Mention its function.
5. What is pecten? Write down its role.
6. Briefly explain the respiratory modifications in birds helping for flight.
7. What are baleen plates?
8. Distinguish between metateria and eutheria.
9. Mention any two flight adaptations of pteropus?
10. Name any four primates
11. Write short account on coprophagy in *Oryctolagus*
12. What is meant by metanephric kidney?

(Ceiling: 20marks)

Section B

II Paragraph questions. Each question carries 5 marks

13. Write a notes on any four recently extinct birds.
14. Explain the structure of typical feather with suitable diagram.
15. Explain the salient features of Order Cetacea with examples
16. Distinguish between Artiodactyla and Perissodactyla
17. With suitable diagram explain the structure of eye in *Oryctolagus cuniculus*.
18. Write the dental formula and add notes on dentition in Rabbit.
19. Compare the structure of heart in Class Amphibia and Mammalia.

(Ceiling: 30 marks)

Section C

III Essay questions. Answer any one question.

- 20 Explain the salient features class archaeopterygiformes and write brief account on discovery and evolutionary significance of archaeopteryx .
- 21 With suitable diagram describe the digestive system of *Oryctolagus cuniculus*.

(1x10 = 10 marks)

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Fourth Semester B.Sc Degree Examination, April 2023

BZL4C04 – Genetics & Immunology

(2019 Admission onwards)

Time: 2 hours

Max. Marks : 60

Section A

I. Short answer questions. Each question carries 2 marks.

1. What is Barr body? Mention its significance.
2. Briefly discuss Genic balance theory
3. What is polygenic inheritance? Give a suitable example.
4. Write short notes on split genes
5. Comment on restriction endonucleases.
6. Mention the features of genetic code
7. What is metastasis?
8. Write short notes on Eugenics.
9. Distinguish between primary and secondary lymphoid organs.
10. Mention the properties of T-cell epitopes.
11. Write notes on features of adaptive immunity.
12. What are attenuated vaccines? Give an example

(Ceiling: 20 marks)

Section B

II. Paragraph questions. Each question carries 5 marks

13. Explain the inheritance pattern of Haemophilia.
14. Explain the process of initiation of Translation.
15. Briefly discuss various gene transfer methods.
16. Briefly discuss different types of Cancers.
17. Explain precipitation and agglutination reactions in immune response.
18. Write brief notes on major steps involved in Southern blotting.
19. Briefly discuss any two primary immunodeficiency diseases

(Ceiling: 30 marks)

Section C

III. Essay questions. Answer any one question.

20. What are the features of a cloning vector? Explain different types of vectors used in genetic engineering
21. With a suitable diagram, explain the structure of a typical antibody. Add notes on different classes of antibodies and their functions.

(1x10 = 10 marks)