

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE  
Third Semester B.Sc Degree Examination, November 2022

**BZL3C04 – Human Physiology**  
(2019 Admission onwards)

Time: 2 hours

Max. Marks : 60

**Part A**

**Answer all questions.**

**Each, question carries Two marks.**

**Ceiling - 20 Marks**

1. What is astigmatism? What are its corrective measures?
2. Explain the trichromatic theory of colour vision.
3. What is organ of Corti? What is its function?
4. Which are the primary sensations of taste in man?
5. How smell signals are transmitted to CNS?
6. Classify nociceptors according to stimulating agents?
7. How tactile corpuscles respond to stimulus?
8. Write on the four types of mechanoreceptors in human skin.
9. How thyroid gland regulates circulating calcium levels?
10. How placenta functions as an endocrine organ?
11. What are the different types of papillae on human tongue.
12. What do you understand by olfactory bulb?

**Part B**

**Answer all questions.**

**Each question carries Five marks.**

**Ceiling - 30 Marks**

13. Describe the organisation of retina.
14. Explain the process of auditory perception.
15. Elaborate on the organisation of olfactory membrane.
16. Write on different modes of hormone action
17. Explain about different visual defects.
18. Write notes on the role of hormones secreted by thyroid gland.
19. How human gonads function as endocrine organs?

Answer any  
Each question carries Ten marks.

20. Write an essay on the structure and functioning of human eye.
21. Describe the structure of adrenal gland and the role of adrenal hormones.

(1 x 10 = 10 Marks)

## FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

## Third Semester B.Sc Zoology Degree Examination, November 2022

## BZL3B03 – Animal Diversity Chordata Part – I

(2019 Admission onwards)

Time: 2 hours

Max. Marks : 60

## SECTION A

Answer the following questions. Each carries *two* marks

1. What are the advanced characters of Chordates?
2. Name any two subterranean fishes?
3. Comment on the temporal fossa in reptiles.
4. Mention about the atrium in *Amphioxus*?
5. Comment on *Anguilla*?
6. Give the significance of *Ammocoetus* larva?
7. What are the characters of Ascidian tadpole?
8. What is nueromast organ?
9. What is mullerian duct?
10. Comment on *Hylonomus*.
11. Give the characters of *Amblystoma*?
12. Write notes on *Gavialis*.

(Ceiling 20)

## SECTION B

Answer the following questions. Each carries *five* marks

13. Classify and give the characters of Urochordata?
14. Explain the brain of *Mugil*?
15. Write a note on Actinopterygii?
16. Write a note on poisonous snakes of Kerala.
17. Explain the circulatory system of *Mugil*?
18. Give the characters and examples of Urodela?
19. Prepare the identification key for venomous and non-venomous snakes of Kerala?

(Ceiling 30)

## SECTION C

Answer any *one* question

20. Explain the circulatory system of *Calotes*?
21. Explain the diversity of Frogs in Western Ghats?

(1 × 10 = 10 Marks)



## FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

## Third Semester B.Sc Botany Degree Examination, November 2022

## BZL3C03 – Physiology and Ethnology

(2019 Admission onwards)

Time: 2 hours

Max. Marks : 60

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

1. What are the major functions of plasma membrane?
2. What is meant by BMR? What is its significance?
3. What are the major physiological adaptations of diving mammals?
4. What is meant by arteriosclerosis?
5. Write short notes on hemolytic jaundice.
6. Differentiate between stenohaline and euryhaline animals.
7. Briefly describe nephrosis.
8. Comment on Rigor mortis.
9. Describe acetyl choline as a neurotransmitter.
10. What is the significance of aggression?
11. Briefly describe altruism.
12. What is meant by photoperiodism?

(Ceiling: 20 marks)

**II. Paragraph questions. Each question carries 5 marks.**

13. Give a brief account on the nervous and hormonal control of digestion.
14. Describe the structure of hemoglobin with necessary diagrams.
15. Discuss urea cycle in brief.
16. Describe the generation of action potential in a neuron.
17. Discuss instinctive behaviour with a suitable example.
18. What is courtship behaviour? What is its significance?
19. What is meant by migration? Evaluate its advantages and disadvantages.

(Ceiling: 30 marks)

**III. Essay questions. Answer any one question.**

20. Describe the biochemistry and physiology of muscle contraction and relaxation.
21. Write an essay on the different types of learned behaviors in animals.

(1 x 10 = 10 marks)