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### FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

### Fourth Semester B.Sc Degree Examination, March /April 2019 BZOL4B04 - Animal Diversity - Chordata Part II

(2017 Admission onwards)

Time: 3 hours

Max. Marks: 80

## Part A Answer ALL the following questions: Each question carries 1 Marks

- 1. What is macula leutea?
- 2. Mammary glands are modified from ......
- 3. Name duct of parotid gland.
- 4. How many cervical vertebrae are in mammals?
- 5. What is corpus callossum?
- 6. Name the ape in India.
- 7. Give the name of phagocytic cells in Liver .
- 8. What are arbor vitae?
- 9. Give the scientific name of African elephant .
- 10. Lower jaw bone is known as.....

 $(10 \times 1=10 \text{ marks})$ 

## Part B Answer any TEN questions: Each question carries 2 Marks

- 11. What is double circulation?
- 12. What is tympanic bulla?
- 13. Mention the heart beat regulation in Oryctolagus.
- 14. What is pecten?mention its function?
- 15. Give the characters of Chiroptera .
- 16. Give the mechanism of hearing in Oryctolagus.
- 17. Give the structure of typical vertebrae in Oryctolagus.
- 18. Differentiate between synsacrum and pygostyle?
- 19. What are Stringiformes? give example.
- 20. Describe syrinx
- 21. Give the dental formula in Rabbit.
- 22. What is aqueductus of sylvius? mention its fuction.

 $(10 \times 2 = 20 \text{ marks})$ 

## Part C Answer any FIVE question. Each question carries 6 Marks

- 23. Give the characters and adaptations of Cetacea.
- 24. Explain the digestive glands in Oryctolagus.
- 25. Give the evolutionary significance of Archeopteryx.
- 26. Write notes on Palaeognathe . Give examples.
- 27. Explain the structure of Oryctolagus eye .
- 28. Explain prototheria with examples.
- 29. Describe the typical feather in Columba.
- 30. Write notes on extinct birds.

 $(5 \times 6 = 30 \text{ mark})$ 

# Part D Answer any TWO questions. Each question carries 10 Marks

- 31. Explain the feathers in Columba.
- 32. Explain respiration and respiratory mechanism in Oryctolagus.
- 33. Compare and contrast the arterial system of Columba and Oryctolagus.
- 34. Describe the flight muscles and flight adaptations in Columba .

 $(2 \times 10 = 20 \text{ mark})$ 

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#### FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester B.Sc Botany Degree Examination, March / April 2019 BZOL4C04 - Genetics & Immunology

(2017 Admission onwards)

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ne the

Max. Marks: 64

Give illustrations and figures wherever necessary

#### PART A

One word questions. Answer all questions. (Each question carries 1 mark)

\* π ε the first documented test tube baby.

metabolic error in which Phenyl alanine accumulates.

developed the DNA fingerprinting?

lich is the autoimmune disease which affect pancreas?

e cancer of plasma cells.

vaccination of tuberculosis.

10 p oposed genic balance theory?

lich is the substance that enhances immunogenicity?

e branch of genetics which deals with science of better living.

e the chromosomal characteristics of an individual

 $(1 \times 10 = 10 \text{ Marks})$ 

#### PART B

answer question: Answer any seven. . (Each question carries 2 marks)

at is amniocentesis?

plain different types of human colour blindness.

list the characteristics of antigens.

mment on genetic counselling.

notes on sex differentiation in Bonellia.

a account of Southern blotting.

in dosage compensation.

efly explain the theories of origin of cancer'

plain modern concepts of gene.

ention the role of introns.

#### PART C

#### Paragraph questions: Answer any four (Each question carries 5 marks)

- 21. Write an account of split genes.
- 22. What is prenatal diagnosis? Explain different methods of prenatal diagnoses
- 23. Describe the concept of gene action
- 24. Write an account on central dogma of molecular biology.
- 25. What is a vector? Write an account of various vectors used in genetic engineering.
- 26. What is immunity? Explain different types of immunological organs.

(4x5=20 Marks)

#### PART D

#### Essay Questions. Answer any two. (Each question carries 10 marks)

- 27. Illustrate with experimental evidence explain DNA as the genetic material.
- 28. Explain the characteristics of cancer cells.
- 29. Write an essay on the mechanism of r DNA technology.
- 30. What are immunoglobulins? Explain the structure and add a note on its role.

 $(2 \times 10 = 20 \text{Marks})$ 

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### FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester BSc Psychology Degree Examination, March /April 2019 BZOO(PSY4)C04 - Human Physiology

(2017 Admission onwards)

e: 3 hours

Max. Marks: 80

## PART A Answer all questions. Each question carries one marks

	wer from the following		
	amus is the	center.	
A) Hunger	×	C) Thirst	D) Punishment
The condition in	which the feeling of ex-	cessive thirst	9
A) adipsia	B) polydipsia	C) oligodipsia	D) hypodipsia
In male sexual ac	ct the orgasm is associat	ed with	
A) Erection	B) ejaculation	C) lubrication	D) refraction
	n of punishment center		
A) Placidity	B) Tameness	C) Rage	D) hunger
Identify the one v	which is not related to to		
A) Benign	B) Malignant	C) encapsulated	D) Thrombus
BMI of a person	with 30 Kg body weigh		
A) 20	B) 25	C) 30	D) 35
the blanks			
Cellular dehydrat	ion thirst is also known	as	
	the onset of menstruation		
	is the headquarter of lin		
	eturn of consciousness i		Aizuras
is a	peptide hormone secret	ed by stomach to	l 1
Drim andial 1	develop into	ed by stomach to stimu	late hunger

(12x 1 = 12 Marks)

# PART B Answer Any seven questions. Each question carries 2 marks

- 13. Name two anorexigenic factor and its location
- 14. Differentiate between osmoreceptors and baroreceptors
- 15. What is ovulation?
- 16. Kluver bucy syndrome
- 17. What is stroke?
- 18. What is ADH, mention its functions
- 19. Wolffian Duct
- 20. Hippocampus
- 21. Multiple sclerosis

 $(7x\ 2 = 14 \ Marks)$ 

### PART C Answer any six questions. Each question carries 5 marks

- 22. Write a short note on obesity
- 23. Explain the role of kidney in water regulation
- 24. Puberty and secondary sexual characteristics.
- 25. Explain neural centers of emotion
- 26. Infections of brain with examples
- 27. Hypovolumic thirst and sodium specific hunger
- 28. Explain the relationship between head of penis and clitoris.
- 29. Write a note on neural centers of eating behaviour

 $(6 \times 5 = 30 \text{ Marks})$ 

# PART D Answer any three questions as essays. Each question carries 8 marks

- 30. Discuss about the signals from digestive system which regulate hunger
- 31. Explain the role of sex hormone in male and female sexual differentiation.
- 32. Write an essay about limbic system
- 33. Explain common neuropsychological disorders
- 34. Explain the physiology of water regulation

(3x 8 = 24 Marks)