

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester B.Sc Degree Examination, November 2025

ZOO3CJ201 – Systematics, Evolution & Zoogeography

(FYUGP 2024 Admission onwards)

Time: 2 hours

Max. Marks : 70

PART – A

All questions can be attended.
Each question carries **Three** marks.

Ceiling -24 Marks

		Cos	Knowledge Level(KL)	Marks
1	What are Homologous organs? Give examples.	2	U	3
2	Name any six biogeographical zones of India.	4	U	3
3	List the merits and demerits of Five Kingdom classification.	1	U	3
4	Who proposed the Germplasm theory? Give an account.	3	U	3
5	Explain Isolated distribution with examples.	4	U	3
6	What are the importance of Connecting Links? Cite two examples.	2	U	3
7	Distinguish between subspecies, sibling species and semi-species.	3	U	3
8	Summarize how the natural barriers interfere animal distribution	4	U	3
9	Diffentiate between Cladistics and Phenetics.	1	U	3
10	What are the Geographic isolating mechanisms?	3	U	3

PART – B

All questions can be attended.
Each question carries six marks.

Ceiling -36 Marks

		COs	Knowledge Level (KL)	Marks
11	Critically evaluate the postulates proposed by Lamarck with examples.	3	U	6
12	Comment on the Biological Species Concept.	3	U	6

13	Substantiate how the morphological and physiological evidences prove organic evolution	2	U	6
14	Analyze and comment on the Zoogeographical realms proposed by Wallace.	4	U	6
15	Enumerate the factors controlling distribution of animals.	4	U	6
16	What is Geological Time Scale? Explain and analyze the major events in evolutionary time scale.	2	U, An	6
17	Explain the Mutation theory of De Vries.	3	U	6
18	Explain the rules and regulations to be followed while proposing a Scientific name as per ICZN.	1	U	6

PART - C

Answer any *one* questions.
Each question carries Ten marks.
1 x 10 = 10 Marks

		COs	Knowledge Level(KL)	Marks
19	Explain in detail the concept proposed by Oparin and Haldane. Discuss the Experiments and the findings that helped to conversion of hypothesis to theory and to differentiate the facts from myths.	2, 6	U	10
20	Describe the concept of Taxonomy and Systematics. Discuss the modern trends in Taxonomy.	1	U	10

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Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester B.Sc Degree Examination, November 2025

ZOO3CJ202 – Practices in entomology, Poultry science and dairy science

(FYUGP 2024 Admission onwards)

Time: 2 hours

Max. Marks : 70

PART – A

All questions can be attended.
Each question carries three mark.
Ceiling -24 Marks

		COs	Knowledge Level(KL)	Marks
1	Classify the main bee products and explain their uses.	CO1	U	3
2	Explain the major methods of beekeeping.	CO1	U	3
3	Describe the structural adaptations in worker bees.	CO1	U	3
4	Discuss the composition and uses of Lac.	CO2	U	3
5	Describe the symptoms and causative organism of the protozoan disease affecting silkworms.	CO2	U	3
6	Describe three types of insect light traps commonly used in pest monitoring.	CO3	U	3
7	Explain the method of using a beating sheet to collect insects from vegetation.	CO3	U	3
8	Describe the main nutrients present in milk and their importance to human health.	CO4	U	3
9	List out the major indigenous breeds of cattle.	CO4	U	3
10	Describe any two common infectious diseases of poultry along with one symptom of each.	CO4	U	3

PART – B
All questions can be attended.
Each question carries six marks.
Ceiling -36 Marks

		COs	Knowledge Level(KL)	Marks
11	Describe the major honey bee species commonly found in India and explain their significance in apiculture.	CO1	U	6
12	Summarize the major tools and equipment used in silkworm rearing.	CO2	U	6
13	Describe the life cycle of the lac insect, focusing on the developmental stages from egg to adult and their relation to lac secretion	CO2	U	6
14	Classify different types of passive insect traps based on their design and mechanism, and describe their specific applications.	CO3	U	6
15	Explain the different types of sieve funnels commonly used to collect small soil insects.	CO3	U	6
16	Outline the distinct strategies required for the summer and winter management of poultry.	CO4	U/R	6
17	Explain the advancement in cattle breeding practices.	CO4	U/R	6
18	Describe the steps and significance of pasteurization in dairy processing.	CO4	U/R	6

PART - C
Answer any *one* questions.
Each question carries Ten marks.

		COs	Knowledge Level(KL)	Marks
19	Describe the social organization of a honey bee colony.	CO1	U	10
20	Explain the key steps involved in transforming harvested cocoons into silk fibre.	CO2	U	10

1 x 10 = 10 Marks

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Reg. No.:

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester B.Sc Degree Examination, November 2025

ZOO3MN201 – Animal Diversity , reproductive Biology and developmental Biology

(FYUGP 2024 Admission onwards)

Time: 2 hours

Max. Marks : 70

PART – A

All questions can be attended.
Each question carries **Three** mark.

Ceiling -24 Marks

		COs	Knowledge Level(KL)	Marks
1	Comment on Phylum Dinoflagellata.	CO1	Remember	3
2	Comment on the significance of yolk in determining cleavage pattern.	CO4	Analyse	3
3	Write about the adaptations of Rhacophorus for their arboreal lifestyle.	CO2	Understand	3
4	How is pluripotency different from totipotency?	CO4	Understand	3
5	Give one function to each of Bartholin's glands and mammary glands.	CO3	Apply	3
6	Write short notes on primary egg membranes.	CO4	Remember	3
7	Write about the parasitic adaptations of Fasciola.	CO1	Apply	3
8	Differentiate between spermatid and sperm.	CO3	Analyse	3
9	Explain the economic importance of Miss Kerala.	CO2	Remember	3
10	Name the five basic morphogenetic movements in gastrulation.	CO4	Remember	3

PART – B

All questions can be attended.
Each question carries six marks.
Ceiling -36 Marks

		COs	Knowledge Level(KL)	Marks
11	Write notes on the sense organs of the Penaeus.	CO1	Understand	6
12	Briefly explain different methods of prenatal diagnosis.	CO3	Understand	6
13	Elaborate on Class Amphibia with examples.	CO2	Remember	6
14	Differentiate between Phylum Mollusca and Phylum Echinodermata.	CO1	Remember	6
15	Detail out structure and function of accessory glands of male reproductive system.	CO3	Apply	6
16	Explain the causes of male and female infertility.	CO3	Remember	6
17	Write notes on the flight adaptation of birds.	CO2	Understand	6
18	Compare holoblastic and meroblastic cleavage with suitable examples.	CO4	Analyse	6

PART - C

Answer any *one* questions.
Each question carries Ten marks.

		COs	Knowledge Level(KL)	Marks
19	Give a brief account on various systems of <i>Oryctolagus cuniculus</i>	CO2	Understand	10
20	Briefly explain the major events involved in mechanism of fertilization	CO3	Understand	10

1 x 10 = 10 Marks

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester B.Sc Degree Examination, November 2025

ZOO3MN202 – Physiology of behavior and senses

(FYUGP 2024 Admission onwards)

Time: 2 hours

Max. Marks : 70

PART – A

All questions can be attended.
Each question carries **Three** mark.

Ceiling - 24 Marks

Qn. No.	Questions	COs	Knowledge Level(KL)	Marks
1	Differentiate between the feeding center and the satiety center.	CO1	Understand	3
2	Comment on Anorexia.	CO1	Remember	3
3	Write a note on the sexually dimorphic nucleus (SDN).	CO2	Remember	3
4	How does damage to cranial nerves affect taste perception?	CO4	Apply	3
5	Briefly explain the role of the amygdala in emotion.	CO2	Understand	3
6	Write a note on the crista ampullaris.	CO3	Remember	3
7	Briefly explain the trichromatic theory of color vision.	CO3	Understand	3
8	How does damage to the frontal lobes affect emotional behavior?	CO2	Apply	3
9	Comment on Meissner's corpuscle.	CO4	Remember	3
10	Briefly explain the two major types of pain.	CO4	Understand	3

PART – B

All questions can be attended.
Each question carries six marks.

Ceiling -36 Marks

		COs	Knowledge Level(KL)	Marks
11	Explain the central factors involved in water regulation	CO1	Understand	6
12	Describe the organization of the olfactory membrane in detail.	CO4	Understand	6
13	Evaluate the effects of environmental stressors on human physiology.	CO2	Apply	6
14	Explain in detail the taste signal transmission pathways to the CNS.	CO4	Understand	6
15	How would damage to the vestibular apparatus affect the balance of the body? Explain.	CO3	Apply	6
16	Explain the structural differences between the male and female hypothalamus.	CO2	Understand	6
17	Explain in detail the process of phototransduction.	CO3	Understand	6
18	Explain the classification of cutaneous senses in detail.	CO4	Understand	6

PART - C

Answer any *one* questions.
Each question carries **Ten** marks.

		COs	Knowledge Level(KL)	Marks
19	Elucidate the behavioral functions of the hypothalamus and associated limbic structures with emphasis on the reward and punishment centers.	CO2	Understand	10
20	Explain the process of auditory perception & pathway with emphasis on the roles of outer, middle and inner ears.	CO3	Understand	10

1 x 10 = 10 Marks