

1B1N25288

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Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

First Semester B.Sc Degree Examination, November 2025

ZOO1CJ101 - An overview of Human Physiology : Life sustaining systems

(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	Define homeostasis	CO1	Remember	3
2	Explain sliding filament theory	CO4	Understand	3
3	Comment on carbon monoxide poisoning	CO2	Understand	3
4	Distinguish between bradycardia and tachycardia	CO3	Understand	3
5	Mention the factors affecting oxygen dissociation curve	CO2	Remember	3
6	Comment on rigor mortis	CO4	Understand	3
7	Explain saltatory conduction	CO4	Understand	3
8	Briefly explain nutrition in pregnancy	CO6	Understand	3
9	Sketch and label the structure of Juxta glomerular apparatus	CO6	Apply	3
10	List out the abnormal constituents of urine	CO6	Remember	3

PART – B

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

Ceiling -36 Marks

		COs	Knowledge Level(KL)	Marks
11	Explain different levels of physiological regulation	CO1	Understand	6
12	Comment on lung volumes and capacities	CO2	Understand	6
13	Illustrate the biochemical pathway of blood coagulation	CO3	Apply	6
14	Briefly describe the types of synapse and synaptic transmissions	CO4	Understand	6
15	Explain the effects of sports on physical health	CO4	Understand	6
16	Give an account of hormonal control of digestion	CO6	Understand	6
17	Explain ornithine cycle	CO6	Understand	6
18	Describe the role of kidney in osmoregulation	CO6	Understand	6

PART - C

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

		COs	Knowledge Level(KL)	Marks
19	Describe the mechanism of transport of oxygen and carbon dioxide in blood.	CO2	Understand	10
20	Give a detailed account of the ultra-structure of skeletal muscle.	CO4	Understand	10

1 x 10 = 10 Marks

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Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

First Semester B.Sc Degree Examination, November 2025

ZOO1MN101 - Foundations of Environmental Biology and Animal Behaviour

(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	Give the scope of ethology?	CO3	Understand	3
2	Mention instinctive behavior with an example?	CO3	Understand	3
3	Comment on conditioned reflex.	CO3	Understand	3
4	Mention the significance of keystone species?	CO2	Recognize	3
5	Comment on parasitism?	CO2	Recognize	3
6	Distinguish between tundra and taiga?	CO6	Understand	3
7	Differentiate between lentic and lotic ecosystems?	CO6	Understand	3
8	Prepare a note on primary productivity?	CO1	Understand	3
9	Ecology is an interdisciplinary subject. Substantiate?	CO1	Apply	3
10	Comment on ecological pyramids.	CO1	Understand	3

PART – B

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

Ceiling -36 Marks

		COs	Knowledge Level(KL)	Marks
11	Explain energy flow in ecosystems?	CO1	Understand	6
12	Give the different types of communication in animals.	CO3	Understand	6
13	Distinguish between habituation, trial and error learning.	CO3	Understand	6
14	Explain population growth curves and its regulation.	CO2	Knowledge	6
15	Write a note on predation?	CO2	Understand	6
16	Discuss e-waste management rules ,2016 in detail.	CO2	Understand	6
17	Give an account on tropical evergreen forest biome.	CO6	Understand	6
18	Discuss the features of tropical dry deciduous forest ecosystems.	CO	Understand	6

PART - C

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

		COs	Knowledge Level(KL)	Marks
19	Explain carbon cycle?	CO1	Understand	10
20	Describe the social organization in termites?	CO4	Understand	10

1 x 10 = 10 Marks

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Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

First Semester B.Sc Degree Examination, November 2025

ZOO1MN102 - Basics in cellular physiology

(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	Differentiate between mitosis and meiosis	CO2	U	3
2	Explain cell theory	CO1	U	3
3	Describe the functions of ribosomes	CO1	U	3
4	Describe the classical concept of a gene	CO2	U	3
5	Distinguish between karyotype and ideogram	CO2	U	3
6	Describe sex linked chromosomes	CO2	U	3
7	In pea plant the allele for tallness (T) is dominant over the allele for dwarfness (t). A heterozygous tall plant is crossed with a dwarf plant. Using Mendel's law of segregation predict the phenotypic ratio of the offspring and explain	CO3	A	3
8	Differentiate between genotype & phenotype.	CO3	A	3
9	Explain the difference between gene mutation and chromosomal mutation giving example	CO4	U	3
10	Differentiate between induced and spontaneous mutation	CO4	U	3

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

		COs	Knowledge Level(KL)	Marks
11	Explain the structural organization of an interphase nucleus.	CO2	U	6
12	Describe the structure and functions of lysosome	CO1	U	6
13	Describe the semi conservative method of DNA replication	CO2	U	6
14	Describe the structure and kinds of chromosomes	CO2	U	6
15	Explain multiple allelism with suitable example.	CO3	A	6
16	In 4'O clock plant (Mirabilis sps) Fi genotypic and phenotypic ratio is same. Justify.	CO3	A	6
17	Explain any two gene mutation disorders giving their causes and symptoms.	CO4	U	6
18	Explain Klinefelter's syndrome. Describe its chromosomal cause and symptoms	CO4	U	6

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

		COs	Knowledge Level(KL)	Marks
19	Describe the major stages of mitosis and explain its significance.	CO2	U	10
20	Discuss about chromosomal anomalies and their causes. Give any two examples of autosomal anomalies including their symptoms and effects on the individual	CO4	U	10

1 x 10 = 10 Mark

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FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

First Semester B.Sc Degree Examination, November 2025

ZOO1FM105 - Reproductive Health and Sex Education

(FYUGP 2024 Admission onwards)

Time: 1 ½ hours

Max. Marks : 50

PART – A

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

Ceiling -16 Marks

		COs	Knowledge Level(KL)	Marks
1	Provide a brief account on reproductive rights of female	CO1	Understand	2
2	Explain the importance of sexual hygiene in reproductive health	CO1	Understand	2
3	Write short notes on child abuse	CO1	Understand	2
4	Mention any two functions of placenta	CO2	Understand	2
5	Analyze the major causes of male infertility	CO3	Apply	2
6	Distinguish between GIFT and ZIFT	CO3	Understand	2
7	The medical report of a couple undergoing infertility treatment shows that the sperms are unable to penetrate the ovum. Can ICSI help them and justify your answer	CO3	Apply	2
8	Provide a brief account on artificial insemination	CO3	Understand	2
9	Write short notes on syphilis	CO4	Understand	2
10	A newly married couple wants to avoid pregnancy for the next two years. Suggest any two suitable contraceptive methods	CO4	Apply	2

PART – B
All questions can be attended.
Each question carries six marks.
Ceiling -24 Marks

		COs	Knowledge Level(KL)	Marks
11	Discuss the problems of adolescence	CO1	Understand	6
12	Briefly describe sexual paraphilia	CO1	Understand	6
13	What is lactation? Give a brief account on hormonal control of lactation	CO2	Understand	6
14	Explain environment dependent sex differentiation in Bonellia	CO2	Understand	6
15	Analyze the major steps of in vitro fertilization procedure	CO3	Apply	6

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

		COs	Knowledge Level(KL)	Marks
16	Explain spermatogenesis and oogenesis	CO2	Understand	10
17	Analyze different prenatal diagnostic techniques	CO4	Apply	10

1 x 10 = 10 Marks