

Reg. No.:



Name:

University of Kerala

U8879

Second Semester FYUGP Degree Examination, April 2025

Discipline Specific Core Course

ZOOLOGY

UK2DSCZOO102 - Wildlife Ecology

Academic Level: 100-199

Time: 2 Hours(120 Mins)

Max. Marks: 56

**Part A.6 Marks:Time 5 Minutes.(Cognitive Level :Remember(RE)/Understand(UN)) Objective Type.1 mark each,
Answer all questions**

Qn No.	Question	CL	CO
1	Recall a social behaviour observed in elephants. Options : A)a) Musth B)b) Hibernation C)c) Migration D)d) Camouflage	RE	1
2	Identify the flagship species commonly used for conservation awareness in India Options : A)a) Red-eared slider turtle B)b) Indian elephant C)c) American bison D)d) Cane toad	RE	4
3	Describe the primary role of a biosphere reserve. Options : A)a) To protect endangered species only B)b) To promote sustainable development and conservation C)c) To provide recreational activities for humans D)d) To study invasive species	UN	4
4	Mangrove forests are important for coastal protection because they: Options : A)Provide timber and fuel B)Increase soil salinity C)Reduce the impact of tsunamis and storms D)Attract only migratory birds	UN	1
5	Musth in elephants is characterized by: Options : A)Increased aggression and high testosterone levels B) Loss of appetite and social isolation	UN	1

Qn No.	Question	CL	CO
	C)Decreased reproductive drive D)Reduction in dominance behaviour		
6	What does 'carrying capacity' refer to? Options : A)The minimum number of species an ecosystem can support B)The maximum number of individuals an ecosystem can support sustainably C)The lifespan of a species D)The food available for species	UN	1

Part B.10 Marks.Time:20 Minutes (Cognitive Level:Understand(UN)/Apply(AP))Two-three sentences.2 marks each.Answer all questions

Qn No.	Question	CL	CO										
7	Identify any four anthropogenic threats to biodiversity	UN	3										
8	Match the following <table><tr><th>Column A</th><th>Column B</th></tr><tr><td>Elephant</td><td>Endangered species</td></tr><tr><td>Nilgiri Tahr</td><td>Kerala</td></tr><tr><td>Great Indian Hornbill</td><td>Invasive species</td></tr><tr><td>Red eared turtle</td><td>Matriarch</td></tr></table>	Column A	Column B	Elephant	Endangered species	Nilgiri Tahr	Kerala	Great Indian Hornbill	Invasive species	Red eared turtle	Matriarch	UN	3
Column A	Column B												
Elephant	Endangered species												
Nilgiri Tahr	Kerala												
Great Indian Hornbill	Invasive species												
Red eared turtle	Matriarch												
9	An ecosystem is facing overpopulation of a particular herbivore species. Suggest an ecological method to balance the population.	AP	2										
10	A group of elephants is observed standing silently around a deceased herd member, touching the body with their trunks. How does this behaviour demonstrate mourning in animals, and why is it significant?	AP	2										
11	How does deforestation contribute to habitat destruction?	AP	3										

Part C.16 Marks.Time:35 Minutes.(Cognitive Level :Apply(AP)/Analyse(AN))Short Answer.4 marks each, Answer all 4 questions,choosing among options * within each question

Qn No.	Question	CL	CO
12	A) Imagine a new species is introduced into an ecosystem. Predict its potential interactions with native species and possible ecological consequences. OR B) Elaborate the difference between a natural disaster and an anthropogenic threat.	AP	1, 3
13	A) Apply the concept of pheromone signaling to explain how social animals coordinate group behavior. OR B) Identify the major human impacts on wildlife behaviour	AP	2, 3
14	A) Discuss the importance of species interactions in shaping community structure. OR B) Develop conservation strategies if the birth rate of a species is too low compared to its death rate.	AN	3, 3
15	A) Compare the effectiveness of in-situ and ex-situ conservation strategies. OR B) Examine the relationship between keystone species and ecosystem stability. Provide examples of species playing a critical role in ecosystem dynamics.	AN	3, 3

Part D.24 Marks.Time: 60 Minutes.(Cognitive Level :Analyse(AN)/Evaluate(EV)/Create(CR)) Long Answer 6 Marks each.Answer all 4 questions choosing among options * within each question

Qn No.	Question	CL	CO
16	A) Examine the impact of musth in male elephants and its role in reproductive success. OR B) Illustrate the role of scent marking and communication in territorial behavior among carnivores.	AN	3, 3
17	A) Deduce the different actions could be taken to decrease human- wildlife interactions that may lead to zoonotic disease outbreaks OR B) How does habitat destruction contribute to the spread of zoonotic diseases among wildlife?	EV	3, 3
18	A) Evaluate the ecological, economic, and social importance of biodiversity in sustaining life on Earth. How do biodiversity loss and conservation efforts impact global ecosystems and human well-being? OR B) Evaluate the effectiveness of wildlife corridors in species conservation and habitat connectivity.	EV	4, 4
19	A) Prepare a field trip report regarding your visit to a Zoological park. OR B) Design a species recovery program for the Nilgiri Tahr that includes habitat restoration, population monitoring, and human-wildlife conflict mitigation.	CR	4, 5