

Reg. No.:



Name:

University of Kerala

U8878

Second Semester FYUGP Degree Examination, April 2025

Discipline Specific Core Course

ZOOLOGY

UK2DSCZOO103 - Aquatic Ecosystems and Sustainable Mangement

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	Which of the following is not a type of freshwater Ecosystem? Options : A)River B)Swamp C)Lagoon D)Lake	RE	1
2	Identify how the destruction of coral reefs affects marine ecosystems. Options : A) It improves biodiversity by creating new habitats. B) It increases the fish populations in the area. C) It leads to loss of shelter, food sources, and breeding grounds for marine species. D) It reduces the levels of ocean pollution.	RE	3
3	The use of either naturally occurring or deliberately introduced <u>microorganisms</u> to consume and break down environmental <u>pollutants</u> , in order to clean a <u>polluted</u> site is termed as: Options : A)Biomagnification B)Bioremediation C) Bioprospecting D) All the above	UN	2
4	Mayflies are used as bioindicators in aquatic ecosystem due to Options : A) High sensitivity to pollution B) Short life cycle C) Key role in food web D) All the above	UN	2
5	Which is not an intertidal organism	UN	1

Qn No.	Question	CL	CO
12	A) Give an account of the adaptations of marine mammals for their mode of life. OR B) Differentiate between Plankton, Nekton, Neuston, and Benthos based on their mode of life in aquatic ecosystems	AP	2, 2
13	A) Explain the major conservation strategies developed and their implementation to protect Ramsar sites in Kerala. OR B) Examine the causes and consequences of habitat destruction in aquatic ecosystems.	AP	3, 3
14	A) Analyze the significance of coral reefs, and examine why it is necessary to conserve them. OR B) Compare and contrast Lentic and Lotic environments.	AN	1, 1
15	A) Analyse the potential for bioprospecting to be used in the development of biomaterials derived from aquatic organisms. OR B) Analyse the role of MPEDA in the preparation of value added seafood products.	AN	4, 4

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) Analyse how bioindicators help to assess the ecosystem conclude the remarks with an example mayflies OR B) Describe the adaptations of Marine Fauna such as planktons, Deep sea fishes and Marine animals	AN	2, 2
17	A) Determine how habitat destruction and oil pollution pose challenges to aquatic ecosystems. Support your answer with key impacts on biodiversity and water quality. OR B) Describe the ecological and socio-economic impacts of habitat destruction.	EV	3, 3
18	A) Comment on any two value added seafood products from MPEDA OR B) Evaluate the potential of water hyacinth as a value-added product and its environmental benefits.	EV	4, 4
19	A) Design a conservation plan for a mangrove ecosystem. OR B) Categorize the different zones of marine ecosystems and evaluate their significance in sustaining marine biodiversity.	CR	1, 1