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MSD-022

**MASTER OF ARTS IN
SUSTAINABILITY SCIENCE
(MASS)**

Term-End Examination

June, 2026

MSD-022 : AQUATIC ECOSYSTEM

Time : 3 Hours

Maximum Marks : 100

Note : (i) Answer any **ten** questions.

(ii) All questions carry equal marks.

1. Compare and contrast the characteristics of oligotrophic and eutrophic lakes. 10
2. Analyze the role of weathering, erosion and deposition in shaping the river's journey from its source to its mouth. 10

3. Describe the definition and limits of the coastal area as per India's Coastal Regulation Zone (CRZ) Notification, 2019. 10
4. Analyze the interdependence between biotic and abiotic components in maintaining the ecological balance of river systems. 10
5. Describe the process of upwelling and its importance in marine ecosystems. How does it affect nutrient availability and marine biodiversity ? 5+5
6. Identify and discuss the threats to wetlands. 10
7. Critically assess the role of wetlands in climate regulation and hazard prevention with special reference to mangrove ecosystem. 10
8. Reflect on the significance of wetlands in recreation and tourism, and their impact on mental health and well-being. 10
9. Explore the role of rivers in modern urban development specially in shaping cities and its economy. 10

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10. Discuss the global efforts in conserving aquatic ecosystems, such as world river day and world wetland day, and their impacts on raising awareness. 10
11. Describe the role of beavers in altering aquatic ecosystems and their significance as keystone species. 10
12. Highlight the role of global financing mechanisms like the Global Environment Facility and the Green Climate Fund in aquatic ecosystem conservation. 10

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