

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

**Term-End Examination**

**June, 2025**

**MSD-022 : AQUATIC ECOSYSTEM**

*Time : 3 Hours*

*Maximum Marks : 100*

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**Note :** Answer any **ten** questions. All questions carry equal marks.

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1. Define aquatic ecosystem. Explain the significant features of lake ecosystem. 2+8
2. Write short notes on the following : 5+5
  - (a) Pelagic and Benthic Zone
  - (b) Ocean biota

3. Write short notes on the following : 5+5
- (a) Climate change and coastal resilience
  - (b) Ecosystem services
4. What is a marine ecosystem ? Explain the processes occurring in marine ecosystem. 2+8
5. What are wetlands ? Explain the importance and threats to wetlands. 2+8
6. Explain the socio-economic and ecological values of river ecosystem. 10
7. Explain the role of aquatic ecosystem towards achieving SDGs. 10
8. What is climate-smart agriculture ? Explain the characteristics and advantages of climate-smart agriculture. 10
9. Explain the salient features of Convention on Biological Diversity. 10
10. Write short notes on the following : 5+5
- (a) SDG-14 : life below water
  - (b) Global Environment facility

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11. Write short notes on the following : 5+5

(a) River rejuvenation

(b) Blue economy

12. Explain the characteristic features of sustainable industrial production system. 10

13. Explain the anthropogenic influence on aquatic ecosystem. 10

14. Write short notes on the following : 5+5

(a) Ecosystem integrity

(b) Livelihood security

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