

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

Term-End Examination

June, 2025

MSD-022 : AQUATIC ECOSYSTEM

Time : 3 Hours

Maximum Marks : 100

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

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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