ANJUMAN - I - ISLAM'S
A. R. KALSEKAR
POLYTECHNIC, NEW PANVEL
ISO 9001:2015 CERTIFIED
DTE Institute Code 3278 Raigad District
Approved by : All India Council for Technical Education (A.I.C.T.E.)
Recognized by : Directorate of Technical Education (D.T.E.) & Govt. of Maharashtra
Affiliated to : Maharashtra State Board of Technical Education (M.S.B.T.E.)
Vision : To be the most sought-after Polytechnic that others would wish to emulate.
Mission : Creating Exuberant Technical Professionals

A Micro-Project Report

On

"FOREST & WATER RESOURCES"

Submitted on "07-10-24"

By

1. 2205690362 – Qazi Arqam Arif

2. 2205690316 – Sayyed Faizan SaeedAhmed

Under Guidance of

"Zeba Ma'am"

In

Three Years Diploma Program in Engineering & Technology of
Maharashtra State Board of Technical Education, Mumbai
(Autonomous)

ISO 9001:2015

At

Anjuman-I-Islam's Abdul Razzaq Kalsekar Polytechnic

Academic Year [2024 - 2025]

MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION, MUMBAI

Certificate

This is to certify that Mr. /Ms./Mrs. Qazi Arqam Arif
Enrollment No: 2205690362 of 5th **Semester** of **Diploma in Computer Engineering** at **Anjuman I Islam's Abdul Razzak Kalsekar Polytechnic,** has completed the **Micro Project** satisfactorily in Subject in the academic year 2024-2025 as per the MSBTE prescribed curriculum of I Scheme.

Place: Panvel

Enrollment No: 220560362

Date: 07/10/24

Exam Seat No:

Project Guide **Head of the Department** **Principal**

Head of Institute

MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION, MUMBAI

Certificate

This is to certify that Mr. /Ms./Mrs. Sayyad Faizan SaeedAhmed
Enrollment No: 2205690316 of 5th **Semester** of **Diploma in Computer Engineering** at **Anjuman I Islam's Abdul Razzak Kalsekar Polytechnic,** has completed the **Micro Project** satisfactorily in Subject in the academic year 2024-2025 as per the MSBTE prescribed curriculum of I Scheme.

Place: Panvel

Enrollment No: 220560316

Date: 07/10/24

Exam Seat No:

Project Guide **Head of the Department** **Principal**

Head of Institute

Annexure – I

Micro-Project On

FOREST & WATER RESOURCE

1. Aims/Benefits of the Micro-Project:

Forest and water resources are vital for ecosystem stability, providing essential resources like food, water, and raw materials while enhancing cultural heritage. They offer critical environmental services, support research, and ensure the sustainability of ecosystems through their interdependent roles. Preserving forest and water resources is crucial for maintaining ecosystems and ensuring human well-being.

2.0 Course Outcomes Addressed:

a. Develop Public awareness about environment
c. Conserve Ecosystem and Biodiversity
d. Apply techniques to reduce Environmental Pollution

3.0 Proposed Methodology:

The proposed methodology for the project are as Follows:

- **Literature Review:** Conduct a comprehensive review of existing research related to forest and water resources to establish a theoretical framework.
- **Data Collection:** Gather quantitative and qualitative data through surveys or field studies to evaluate the condition and utilization of forest and water resources.
- **Data Analysis:** Analyze the collected data using statistical tools to identify trends and patterns in the state of forest and water resources.

- **Monitoring and Evaluation:** Establish a system for ongoing monitoring and evaluation of forest and water resource management to assess the effectiveness of implemented conservation strategies.

4.0 Action Plan:

Sr No.	Details of Activity	Planned Start Date	Planned Finish Date	Name of the Responsible Team Members
1	Power Point	18/08/24	20/08/24	Faizan Sayyad & Arqam Qazi
2	Report	01/10/24	02/10/24	Arqam Qazi

5.0 Resources Required:

Sr No.	Name of Resources/Material	Specifications	Qty.	Remarks
1	Laptop	8.00 GB Ram windows 11	1	
2	Microsoft Word & Power point	Software	2	

Names of Team Members with Enrollment No.:

1. 2205690362 – Qazi Arqam Arif
2. 2205690316 – Sayyad Faizan SaeedAhmed

Annexure – II

Micro-Project On

FOREST & WATER RESOURCES

1.0 Rationale (Importance of project):

The conservation of forest and water resources is crucial for maintaining the health and resilience of ecosystems, which provide essential services such as clean air, fresh water, and food security. This project aims to address the pressing need for the protection and sustainable management of these resources through comprehensive research and conservation strategies. By safeguarding forests and water systems, we can mitigate the impacts of climate change, preserve vital natural resources, and support ecosystem stability. Furthermore, enhancing public awareness and community involvement in forest and water resource conservation fosters a culture of sustainability and environmental stewardship. Ultimately, this project plays a vital role in promoting ecological balance, supporting economic development, and ensuring a sustainable future for generations to come.

2.0 Aims/Benefits of the Micro-Project:

Forest and water resources are vital for ecosystem stability, providing essential resources like food, water, and raw materials while enhancing cultural heritage. They offer critical environmental services, support research, and ensure the sustainability of ecosystems through their interdependent roles. Preserving forest and water resources is crucial for maintaining ecosystems and ensuring human well-being.

3.0 Course Outcomes Addressed:

a. Develop Public awareness about environment
c. Conserve Ecosystem and Biodiversity
d. Apply techniques to reduce Environmental Pollution

4.0 Literature Review:

The conservation of forest and water resources is vital for sustaining healthy ecosystems and supporting human well-being, as highlighted by numerous studies. Effective assessments of forest and water resources help identify critical areas for conservation and the sustainable use of these resources. Research indicates that preserving forests and water systems enhances ecosystem resilience, allowing natural systems to adapt to environmental changes and climate impacts. Additionally, studies emphasize the importance of public awareness and community involvement in the conservation of forest and water resources, as local engagement fosters sustainable practices and resource management.

5.0 Actual Method Followed (Step wise execution):

The actual method followed for the project are as Follows:

- **Field Surveys:** Conducted field surveys to collect data on forest conditions, water quality, and resource utilization.
- **Data Analysis:** Analyzed the collected data to identify trends and assess the current state of forest and water resources.
- **Stakeholder Engagement:** Engaged local communities and stakeholders to gather insights and foster collaboration in managing forest and water resources.
- **Action Plan Development:** Developed a detailed action plan outlining specific strategies for the conservation and sustainable management of forest and water resources.

6.0 Actual Resources Used:

Sr No.	Name of Resources/Material	Specifications	Qty.	Remarks
1	Computer System	8.00 GB Ram windows 10	1	
2	Microsoft Word & Power point	Software	2	

Skills Developed:

1. Data Collection and Analysis
2. Field Survey Techniques
3. Stakeholder Engagement and Communication
4. Action Plan Development and Implementation

Application:

1. Forest and Water Resource Conservation Planning
2. Ecological Impact Assessments
3. Sustainable Forest and Water Resource Management
4. Public Awareness Campaigns

Names of Team Members with Enrollment No.:

1. 2205690362 – Qazi Arqam
2. 2205690316 – Sayyad Faizan

INDEX

Table of Contents:

ABSTRACT

Forest and water resources refer to the natural assets that provide essential services for the survival of all living organisms and the health of the planet. Forests support a wide range of ecosystem services, including carbon sequestration, soil stabilization, and the provision of raw materials, while water resources are critical for drinking, agriculture, sanitation, and maintaining ecosystems. Together, these resources are vital for sustaining human survival by ensuring the availability of food, clean water, and raw materials for economic development.

Forests and water resources also play a crucial role in regulating the Earth's climate, maintaining soil fertility, and supporting the water cycle. Healthy and diverse ecosystems enhance ecological resilience, enabling them to withstand and recover from environmental disturbances such as natural disasters, disease outbreaks, and climate change. For instance, well-managed forests and clean water systems are better equipped to continue functioning even when external pressures arise, ensuring long-term ecological stability.

Furthermore, forest and water resources contribute significantly to economic prosperity by supporting industries such as agriculture, fisheries, forestry, and tourism. Many livelihoods depend on the sustainable use of these natural resources, and clean water is essential for all aspects of life. The degradation of forests and water systems can disrupt these services, leading to severe consequences for both nature and human well-being.

This report highlights the significance of forest and water resources, the major threats they face, and the efforts being made to conserve them. Areas rich in natural resources but highly threatened by habitat loss and unsustainable use are discussed in detail. The report concludes by emphasizing the need for continued conservation efforts to maintain ecological balance, support human well-being, and sustain the availability of natural resources for future generations.

INTRODUCTION

Forest and water resources form the foundation of ecosystem services and are crucial for human survival, providing essential resources such as food, clean water, and raw materials. Forests encompass diverse ecosystems that support climate regulation, water source protection, and soil fertility, while water resources are fundamental for drinking, agriculture, sanitation, and maintaining life on Earth. These natural assets also provide economic benefits through agriculture, fishing, forestry, and tourism, while supporting medicinal resources vital to human health.

The interconnectedness of forests, water systems, and species within ecosystems ensures the stability and resilience of natural processes, making these ecosystems more capable of recovering from disturbances such as natural disasters, climate fluctuations, or disease outbreaks. Forests and water bodies also support cultural and recreational activities, from ecotourism to traditional practices, contributing to the well-being and identity of human communities worldwide.

However, forest and water resources are under significant threat from human activities, including deforestation, overexploitation, pollution, and the unsustainable management of these resources. As human populations expand, the rapid conversion of forested areas into agricultural land and urban developments fragments ecosystems and leads to the depletion of water sources. Climate change further exacerbates these threats by altering ecosystems and water availability, making it difficult for many species and natural systems to survive or adapt. Without urgent action, the degradation of forest and water resources will have profound and irreversible impacts on ecosystem services, ultimately affecting the sustainability of human life and economies.

Importance of Forest Resources & Water Resources

- **Human Survival:** Forests and water resources are essential for providing the basic resources that support life, including food, clean air, and fresh water. Healthy forests and water systems ensure the regeneration of soil, purification of water, and maintenance of the water cycle—services that are fundamental to human survival.

- **Medicinal Resources:** Many life-saving drugs, such as antibiotics, anti-cancer agents, and pain relievers, have been derived from plant species found in forests. The continued discovery of new medicinal compounds is highly dependent on preserving forests and their rich biodiversity.

- **Economic Benefits:** Forests and water resources support numerous industries, including agriculture, fishing, forestry, and tourism. Forests contribute to timber, food production, and other raw materials necessary for human development. In addition, nature-based tourism, which often revolves around forest ecosystems and water bodies, generates significant revenue for local economies, particularly in regions rich in natural resources like tropical rainforests, rivers, and lakes.

- **Cultural and Recreational Value:** Forests and water bodies hold significant cultural importance for many communities, particularly indigenous peoples, whose traditions and livelihoods are closely connected to their natural surroundings. Forested landscapes and water bodies also offer recreational opportunities such as hiking, fishing, birdwatching, and nature exploration, enhancing mental and physical well-being.

- **Ecological Balance:** Forest and water resources ensure that ecosystems remain functional and balanced. Each element within forests and water systems plays a role in the intricate web of life, contributing to processes like nutrient cycling, pollination, water purification, and waste decomposition. This ecological balance is crucial for maintaining resilient ecosystems that can adapt to environmental changes and continue to support life.

- **Climate Regulation:** Forests, wetlands, and water bodies act as natural carbon sinks, helping to regulate the global climate by absorbing carbon dioxide from the atmosphere. Forests and healthy water systems are more effective at mitigating climate change because they tend to be more stable and productive, contributing to long-term climate regulation.

Threats to Forest Resources

- **Deforestation:** One of the most significant threats to forests is large-scale deforestation caused by agricultural expansion, logging, and urbanization. As forests are cleared to make way for crops, livestock, and infrastructure, critical habitats are destroyed, leading to loss of biodiversity and ecosystem services.

- **Illegal Logging:** Unsustainable and illegal logging practices contribute to the depletion of forest resources. These activities often bypass conservation laws, leading to the degradation of forests and reducing their ability to provide essential services like carbon sequestration and biodiversity preservation.

- **Forest Fires:** Increasingly frequent and intense forest fires, driven by both human activities and climate change, can cause large-scale destruction of forests. Forest fires not only destroy vegetation but also release stored carbon into the atmosphere, exacerbating climate change.

- **Climate Change:** Changes in climate patterns, including temperature rise, shifting rainfall patterns, and extreme weather events, are putting immense pressure on forest ecosystems. Climate change disrupts natural processes like tree growth, regeneration, and the distribution of species, leading to forest degradation and reduced resilience.

- **Overexploitation of Resources:** Overharvesting of timber, fuelwood, and other forest products places unsustainable pressure on forest ecosystems. Overexploitation can result in loss of habitat, soil degradation, and decreased biodiversity, ultimately reducing the ability of forests to regenerate.

- **Invasive Species:** Non-native plant and animal species that invade forests can outcompete native species for resources, alter forest composition, and destabilize ecosystems. Invasive species can reduce biodiversity and alter ecosystem services provided by forests.

Threats to Water Resources

- **Water Pollution:** Industrial waste, agricultural runoff (containing fertilizers and pesticides), and untreated sewage are major sources of water pollution. These contaminants degrade water quality, harm aquatic ecosystems, and make water unsafe for drinking and other uses.

- **Over-extraction of Water:** Excessive withdrawal of water for agriculture, industrial use, and domestic consumption leads to the depletion of water resources, particularly in rivers, lakes, and underground aquifers. Over-extraction can result in water scarcity, reducing the availability of fresh water for ecosystems and human populations.

- **Climate Change:** Climate change is altering the availability and distribution of water resources. Changes in rainfall patterns, prolonged droughts, and more frequent extreme weather events are exacerbating water scarcity and causing fluctuations in river flows, lake levels, and groundwater reserves.

- **Deforestation and Land Degradation:** The removal of forests can disrupt the water cycle by reducing transpiration and increasing surface runoff. Deforestation leads to soil erosion, which contributes to sedimentation in rivers and reservoirs, reducing their capacity and water quality.

- **Wetland Destruction:** Wetlands play a critical role in regulating water flow, filtering pollutants, and providing habitats for a wide range of species. The conversion of wetlands for agriculture, urbanization, and industrial use leads to the loss of these important natural water systems, compromising water quality and ecosystem services.

- **Invasive Species:** Invasive aquatic species, such as certain fish or plants, can upset the balance of water ecosystems. These species often outcompete native species, alter water quality, and disrupt the ecological functions of rivers, lakes, and wetlands.

Conservation of Forest Resources

- **Sustainable Forestry Practices:** Implementing sustainable forestry techniques, such as selective logging and agroforestry, helps maintain forest health while allowing for the harvesting of timber and non-timber products. Certification programs like the Forest Stewardship Council (FSC) promote responsible management practices.

- **Reforestation and Afforestation:** Planting native trees and restoring degraded forest areas are essential for replenishing forest resources. Reforestation efforts help restore biodiversity, enhance carbon sequestration, and improve soil and water quality.

- **Protected Areas:** Establishing national parks, wildlife reserves, and protected areas helps safeguard critical forest ecosystems. These areas serve as habitats for diverse species and contribute to conservation efforts by limiting human activities that can degrade forest resources.

- **Community-Based Forest Management:** Involving local communities in forest management can lead to more effective conservation outcomes. Community engagement encourages sustainable practices, as local populations often have a vested interest in maintaining healthy forests for their livelihoods.

- **Legislation and Policy Enforcement:** Strengthening laws and regulations regarding land use, logging, and land conversion can help protect forest resources. Effective enforcement of existing policies is crucial to combat illegal logging and deforestation.

- **Public Awareness and Education:** Raising awareness about the importance of forests and their ecosystem services can encourage responsible behavior and community participation in conservation efforts. Educational programs can foster a sense of stewardship and encourage sustainable practices.

Conservation of Water Resources

- **Sustainable Water Management:** Implementing integrated water resource management (IWRM) practices ensures the sustainable use and protection of water resources. This approach considers social, economic, and environmental factors in managing water systems.

- **Pollution Prevention:** Reducing the discharge of pollutants into water bodies is crucial for preserving water quality. Strategies include treating industrial wastewater, using organic farming practices to limit agricultural runoff, and promoting waste management practices.

- **Restoration of Watersheds:** Protecting and restoring watersheds improves water quality and availability. Initiatives may include reforestation, wetland restoration, and soil conservation practices that reduce erosion and runoff.

- **Rainwater Harvesting and Water Recycling:** Encouraging rainwater harvesting and implementing greywater recycling systems can help communities reduce their dependence on freshwater sources, thus conserving water resources.

- **Conservation of Wetlands:** Protecting existing wetlands and restoring degraded ones play a vital role in maintaining water quality, regulating water flow, and providing habitats for numerous species. Wetlands act as natural filters and help mitigate floods.

- **Public Education and Advocacy:** Raising public awareness about water conservation and the importance of protecting water resources can foster responsible water use. Educational campaigns can promote practices like water-saving technologies and encourage community involvement in conservation initiatives.

Case Studies on Forest Conservation

Introduction: The Amazon Rainforest, often referred to as the "lungs of the Earth," spans over 5.5 million square kilometres across several countries, primarily Brazil, Peru, and Colombia. It is the most biodiverse rainforest on the planet, home to millions of species of flora and fauna. The Amazon plays a critical role in regulating the global climate and is vital for the livelihoods of indigenous communities.

Issues:

1. **Deforestation:** The Amazon faces unprecedented levels of deforestation due to logging, agriculture, and urbanization. Approximately 17% of the Amazon has been cleared in the last 50 years, threatening biodiversity and contributing to climate change by releasing stored carbon dioxide.
2. **Climate Change:** Altered rainfall patterns and increased temperatures due to global warming are affecting the resilience of the Amazon ecosystem. These changes can lead to a decrease in tree cover, further exacerbating deforestation.
3. **Illegal Activities:** Illegal logging, mining, and land grabbing pose significant threats to the Amazon's integrity. These activities often occur with minimal regulation and oversight, resulting in the degradation of forest resources.

Conservation Efforts:

1. **Protected Areas:** The establishment of national parks and reserves has been a key strategy in conserving the Amazon. For instance, the Tumucumaque Mountains National Park in Brazil protects large areas of rainforest and promotes biodiversity.
2. **Community Involvement:** Empowering indigenous communities to manage and protect their ancestral lands has proven effective in conservation. Indigenous groups often have a deep understanding of their ecosystems and employ sustainable practices.
3. **Sustainable Practices:** Encouraging sustainable agriculture and logging practices helps reduce the pressure on the forest. Certification programs, such as those by the Forest Stewardship Council (FSC), promote responsible forestry.
4. **International Cooperation:** Global partnerships and funding from organizations like the Amazon Fund support conservation initiatives aimed at reducing deforestation and protecting biodiversity.

Case Studies on Water Conservation

Introduction: The Ganges River, known as the Ganga in India, is one of the most significant water bodies in the world, serving as a vital lifeline for millions of people. Spanning over 2,500 kilometres, the river is revered as sacred by Hindus and supports agriculture, drinking water supply, and industry across several states in India.

Issues:

1. **Pollution:** The Ganga faces severe pollution due to industrial discharge, untreated sewage, and agricultural runoff. Reports estimate that around 3 billion liters of untreated sewage are discharged into the river daily, compromising water quality and harming aquatic life.
2. **Over-extraction:** Increased water extraction for irrigation and domestic use has led to reduced water levels in the river, affecting ecosystems and livelihoods dependent on the river's resources.
3. **Ecosystem Degradation:** The degradation of the river's ecosystem has resulted in declining fish populations and the loss of biodiversity, threatening the livelihoods of communities that rely on fishing.

Conservation Efforts:

1. **Ganga Action Plan (GAP):** Launched in 1986, the GAP aimed to reduce pollution levels in the Ganges through various measures, including the establishment of sewage treatment plants and waste management facilities.
2. **Namami Gange Program:** Initiated in 2014, this comprehensive program focuses on the rejuvenation of the Ganga River through pollution abatement, river surface cleaning, afforestation, and biodiversity conservation. The program also emphasizes community engagement and awareness.
3. **Sustainable Water Management:** Implementing sustainable agricultural practices, such as rainwater harvesting and organic farming, helps reduce runoff and pollution entering the Ganga.
4. **Public Awareness Campaigns:** Engaging local communities through awareness campaigns fosters a sense of responsibility and encourages sustainable practices to protect the river.

Conclusion

The preservation of forest and water resources is essential for maintaining ecological balance, economic stability, and cultural heritage. These natural resources underpin the health of ecosystems, providing critical services such as clean air and water, climate regulation, and habitat for countless species. This intricate web of life plays a fundamental role in supporting human livelihoods and well-being, emphasizing the interconnectedness between nature and society.

Forest resources, such as those found in the Amazon Rainforest, serve as significant carbon sinks and habitats, while water bodies like the Ganga River support diverse ecosystems and provide essential resources for millions of people. Protecting these resources is not just about conserving landscapes; it is about sustaining the ecosystem services that underpin our very existence.

Areas rich in forest and water resources represent the highest priority for conservation efforts. These regions require urgent attention to prevent further decline and degradation. By protecting forests and rivers, we contribute to global ecological resilience and ensure the sustainability of vital resources.

Despite notable efforts to conserve these resources and restore habitats, ongoing challenges such as habitat loss, overexploitation, pollution, and climate change continue to threaten the health of our forests and waterways. Rapid urbanization, industrialization, and agricultural expansion exacerbate these issues, leading to the fragmentation of ecosystems and increased pressure on vulnerable habitats.

Addressing these challenges demands increased public awareness of the importance of forest and water resource conservation. Education plays a pivotal role in fostering a culture of stewardship, where individuals and communities recognize their responsibility in protecting these vital resources.

Moreover, securing adequate funding and resources is crucial for implementing effective conservation strategies. Financial support from governments, international organizations, and private sectors is necessary to sustain conservation initiatives, restore habitats, and protect critical ecosystems, particularly in areas like the Amazon and the Ganga.

In conclusion, the protection of forest and water resources is a shared responsibility that requires concerted efforts from all sectors of society. By prioritizing conservation, fostering awareness, and promoting collaborative initiatives, we can safeguard these invaluable resources for future generations. The health of our planet and the well-being of humanity depend on our ability to preserve and restore our natural environment.

References

- **Food and Agriculture Organization (FAO).** (2020). *Global Forest Resources Assessment 2020: Main Report.*
  Available at: FAO Website
- **United Nations Environment Programme (UNEP).** (2016). *Water Resources Management.*
  Available at: UNEP Website
- **Millennium Ecosystem Assessment.** (2005). *Ecosystems and Human Well-being: Water Synthesis.*
  Available at: Millennium Ecosystem Assessment
- **World Resources Institute (WRI).** (2016). *Aqueduct Water Risk Atlas.*
  Available at: WRI Website
- **International Union for Conservation of Nature (IUCN).** (2019). *The Importance of Forests for Water Security.*
  Available at: IUCN Website
- **Ganga River Basin Management Plan (GRBMP).** (2015). *Ministry of Water Resources, Government of India.*
  Available at: GRBMP Document

Annexure IV

Micro Project Evaluation Sheet

Name of Student: …… **Enrollment No:**……..……..……

Name of Programme:……..…… **Semester:** ……..

Course Title: …….. **Code:**……..……

Title of the Micro-Project: ……..

Course Outcomes Achieved:-

a) ……

b) ……..……...

c) ……

d) ……

Sr. No.	Characteristic to be assessed	Poor (Marks 1 - 3)	Average (Marks 4 - 5)	Good (Marks 6 - 8)	Excellent (Marks 9- 10)	Sub Total
(A) Process and Product Assessment (Convert above total marks out of 6 Marks)						
1	Relevance to the course					
2	Literature Review/information collection					
3	Completion of the Target as per project proposal					
4	Analysis of Data and representation					
5	Quality of Prototype/Model					
6	Report Preparation					
(B) Individual Presentation / Viva (Convert above total marks out of 4 Marks)						
7	Presentation					
8	Viva					

(A) Process and Product Assessment (6 marks)	(B) Individual Presentation/Viva (4 marks)	Total Marks 10

Comments/Suggestions about team work/leadership/inter-personal communication (if any)

……..……...……

……..……...……

……..……

Name and designation of the Teacher……

Dated Signature ……

Annexure IV

Micro Project Evaluation Sheet

Name of Student: ..... **Enrollment No:**.....

Name of Programme:..... **Semester:** .....

Course Title: ..... **Code:**.....

Title of the Micro-Project: .....

Course Outcomes Achieved:-

a) .....

b) .....

c) .....

d) .....

Sr. No.	Characteristic to be assessed	Poor (Marks 1 - 3)	Average (Marks 4 - 5)	Good (Marks 6 - 8)	Excellent (Marks 9- 10)	Sub Total
(A) Process and Product Assessment (Convert above total marks out of 6 Marks)						
1	Relevance to the course					
2	Literature Review/information collection					
3	Completion of the Target as per project proposal					
4	Analysis of Data and representation					
5	Quality of Prototype/Model					
6	Report Preparation					
(B) Individual Presentation / Viva (Convert above total marks out of 4 Marks)						
7	Presentation					
8	Viva					

(A) Process and Product Assessment (6 marks)	(B) Individual Presentation/Viva (4 marks)	Total Marks 10

Comments/Suggestions about team work/leadership/inter-personal communication (if any)

.....

.....

.....

Name and designation of the Teacher.....

Dated Signature .....

ANNEXURE II

Evaluation Sheet for Micro Project

Academic Year: 2024-2025 **Name of Faculty:** Ms. Zeba Syed

Course: EST **Course Code:** 22447 **Semester:** 5th

Title of the Project: FOREST & WATER RESOURCES

COs Addressed by the Micro Project:

b. Prepare test cases for different types and levels of testing.
c. Prepare test plan for an application.
d. Identify bugs to create defect report of given application.

Major Learning Outcomes achieved by the students during this Project:

(a) Practical Outcome:

- We gain hands-on experience with forest and water resources assessment methodologies and learn to analyze related data effectively.

(b) Unit Outcomes in Cognitive Domain:

- We develop an understanding of Forest and water resources principles, enhancing our critical analysis of trends and challenges in these areas.

(c) Questions in effective Domain:

- We reflect on the importance of thorough documentation in conservation efforts and our commitment to improving practices for the sustainable management of forest and water resources.

Comments/Suggestions about team work/leadership/inter-personal communication (if any)

……
……

Enrollment No.	Students Name	Marks out of 6 for performance of group activity	Marks out of 4 for performance in oral/ presentation	Total out of 10
2205690362	Arqam Qazi			
2205690316	Faizan Sayyad			

(Name and Signature of the Faculty)