Name of Department: ENVIRONMENT STUDIES

Name of Programme: M.Sc.I Year (ENVIRONMENT SCIENCE)

VISION

To provide basic and advanced knowledge of Environment Science.

Mission

Being the Environment Sciences Department, our mission is to train the manpower with the knowledge of Environment and its various components to undertake and promote basic and applied research in future.

Programme Outcome

PO1: To understand the physical, biological, and chemical components of environment to gain the knowledge about the principles and their interlinking that governs the complex environmental systems.

PO2: To expose the students to a holistic understanding of environmental processes and interactions.

PO3: To educate the students on the principles and dynamics of environmental chemistry, as well as the toxicological effects on the environment.

PO4: To familiarise students with the most frequent types of the environmental havoc and their characteristics, as well as the methods to remove them from the environment.

Programme Specific Outcome

Student can apply the knowledge of Environment in semester exams, in National Level competitive exams, gaining internship, placement and higher studies.

Semester 1				
	Course Code	Course Title	Objectives	Outcomes
Paper-I	ENV-6101	Environment Geoscience	fundamental concepts of geo-science in	The knowledge can be used to protect and fix damage to our country's
			relation to environmental aspects.	wetlands, streams, rivers, and shorelines. Further, this subject

				provides a wide application for jobs such as geology in planning and development, and geological hazards including pollution and conservation.
Paper-II	ENV-6102	Ecological Principles	To acquaint the students with the concept of ecology and various interactions among organisms and dynamics of ecosystems in relation to human life.	This subject provides fresh information about the interdependence of people and nature, which is essential for the production of food, the maintenance of clean air and water, and the maintenance of biodiversity in a changing climatic world. This subject fosters a connection between individuals and both natural and built environments.
Paper-III	ENV-6103	Environmental Chemistry & Toxicology	To acquaint the students with the dynamics and principle of environmental chemistry and their toxicological effects on environment.	Students learn about the various aspects of environmental toxicology research which provide them the capacity to further to avert significantly better in terms of environmental deterioration, including detrimental effects on human health.
Paper-IV	ENV-6104	Integrated Solid Waste Management and Techniques	To acquaint the students with the common municipal solid wastes, their characteristic and the chaos caused by these wastes in the environment and to study the latest technologies to dispose of such wastes.	This subject helps to bring the current image of the society, how we are dealing with our waste generation and management. Further, helps to the protect public health and improve environment conditions in terms of municipal solid waste.

VISION

To provide basic and advanced knowledge of Environment Science.

Mission

Our primary goal is to educate the next generation of researchers in the field of environmental science.

Programme Outcome

PO1: To teach students the basics and practical ways to protect biodiversity and conserve natural resources while meeting human needs.

PO2: To expose the students about how to use instruments for chemical analysis, necessary for modern studies of environmental pollution.

PO3: To educate the public and raise awareness about the water, air, soil, and noise pollution, all of which have a negative impact on the environment and our health.

PO4: To familiarise students with the importance of environmental effect assessment and the various methods of impact assessment and auditing.

Programme Specific Outcome

Student can apply the knowledge of Environment in semester exams, in National Level competitive exams, gaining internship, placement and higher studies.

Semester 2				
	Course Code	Course Title	Objectives	Outcomes
Paper-I	ENV-6201	Biodiversity and Conservation	To acquaint the students with the basic and applied aspects of protecting biodiversity and conservation of natural resources, while providing for human needs	functioning ecosystems, recreational pursuits that rely on our biodiversity
Paper-II	ENV-6202	Environmental Analysis: Techniques and Instrumentation	To upgrade the students with knowledge on instrumental techniques of chemical analysis, practical work with the realistic samples from the environment so that they could become familiar with the instrumentation this is inevitable for contemporary	principles, design, working & application of various techniques and tools available, which can be further used in industrial applications,

			investigations of environmental	
			pollution.	
Paper-III	ENV-6203	Environmental	The students shall be equipped with the	The subject helps to understand the
		Pollution	knowledge of different types of	urgent need of clean air, portable
			pollution, their sources and intensity	drinking water, and fertile soil for
			and its consequence on man animal	sustainable development. The course
			plants and monuments over a period of	will enable students to understand the
			time.	National and International learning
				standards and how badly the
				environment is affected.
Paper-IV	ENV-6204	Environmental	To acquaint the students with	The course aims to provide an
		Impact	importance of Environment Impact	understanding on the prediction
		Assessment and	assessment and various methodologies	accuracy of a developmental project
		Auditing	of impact assessment and auditing.	and its actual environmental outcomes.

Name of the Department: ENVIRONMENT STUDIES

Name of the Programme: MSc. II Year (ENVIRONMENT SCIENCE)

Vision

To develop the Department as a major academic and research hub in area of Environmental Sciences by producing skilled postgraduate students.

Mission

To provide an advanced knowledge of the subject and its applications to the students for their future pursuits in academics.

Programme Outcomes

P-I: To apply the knowledge of various environmental technologies in the different types of pollution (air, soil and water)

P-II: To apply the knowledge to reduce the effects of various types of environmental issues like over population, global warming, waste management to achieve sustainable development goals

P-III: To develop scientific attitude to carry out further research in various environmental fields.

P-IV: To identify the multiple sources of waste, different strategies for the waste management.

Programme Specific Outcomes

Student can apply the knowledge of Environment in semester exams, in multiple levels of nationals and international competitive exams, gaining internship, placement and higher studies in different sectors of Environment Studies

Semester 3	Course Code	Course Title	Objective	Course Outcome
Paper-I	ENV-6301	Environmental Technology	To acquaint the students with latest environmental technology on how to combat with common environmental issues and related problems without altering the natural environmental conditions.	Students can apply the knowledge of various environmental technologies in the different types of pollution (air, soil and water)
Paper-II	ENV-6302	Major Environmental Issues	To provide assessments of the current status and trends in major developmental and environmental issues at the national, sub regional, regional and global levels.	Students can apply their knowledge in reduce the effects of various types of environmental issues like over population, global warming, waste management to achieve sustainable development goals
Paper-III	ENV-6303	Environment and Energy Management	To provide the students with information on how to manage the	Students can grab opportunities to apply their knowledge in different environment management strategies by using natural sources of energy to reduce the burden of energy sectors

Paper-IV	ENV-6304	Industrial and	natural resou on a sustain basis, reducing threat degradation, confirming various environmental regulations To acquaint	able g the of and to	Students can identify the multiple sources of Biomedical waste,
raper-1v	LIN V-0304	Biomedical	students	to	types and how they can manage the sources of BMWs in
		Waste	understand	the	hospital and create awareness regarding the waste management
		Management	difference	in	
			perception	of	
			hazardous	and	
			biomedical		
			wastes		
			management,		
			applications		
T70 0			their limitatio	ns.	

Vision

To be a centre of excellence for multidisciplinary research, education and the dissemination of knowledge relevant to the national and international environmental challenges, energy and sustainability.

Mission

to conduct state-of-the-art and highly relevant study methods to promote postgraduate studies and other learning opportunities and to create awareness in the students for the prevention of environment by organizing seminars, workshops, day celebrations.

Programme Outcomes

- P-I: Have adequate knowledge on measurement & scaling techniques as well as the quantitative data analysis
- P-II: Develop understanding on various kinds of research, objectives of doing research, research process, research designs and sampling.

P-III: Have basic awareness of data analysis-and hypothesis testing procedures

P-IV: Have a knowledge of geospatial analysis techniques using remote sensing and GIS tools toward solving quantitative problems in one or more core disciplinary areas of environment

Programme Specific Outcomes

- : To disseminate knowledge of advanced topics in Environment under different specializations.
- : To encourage the students to opt for the research lab and topic of their interest through the research diversity of the faculty of the department in new, advanced and challenging areas of environment during their practical related work.

Semester-4	Course Code	Course Title	Objective	Course outcome
Paper-I	ENV-6401	Statistical Applications and Research Methodology	To acquaint the students with fundamentals of statistics and research methodology.	Students have the critical thinking in the theory of numerous statistical applications and its utilization in environmental problems.
Paper-II	ENV-6402	Environmental Biotechnology	To acquaint the students with information on how to improve understanding, identification, and prevention of environmental problems, remediation & restoration through biotechnological methods.	Students can explain technologies, tools and techniques in the field of environmental biotechnology and can get the Knowledge regarding the role of microorganisms as biotechnological agents to remove environmental pollutants.
Paper-III	ENV-6403	Remote Sensing and	To introduce the students with the	Students can apply a range of geospatial analysis techniques using remote sensing and GIS tools toward solving quantitative

		GIS in Environmental Studies	applications of Earth observation technology and Geoinformatics in environmental studies and research. This paper aims at developing students' decision making capabilities for the management of environmental	geography, ecology, environmental sciences, biogeosciences,
Paper-IV	ENV-6404	Training of at least 4-6 weeks, project report, presentation	problems. To enhance the critical thinking, research aptitude and presentation skills of the students via seminars on the advanced topic of the discipline.	employment.