

S. No.	Course Code	Course Name	Course Type	Cd	L	T	P	Marks		
								Sessional	Final Exam	Total
3	UGMDC-102(B)	Environmental Sustainability	MDC	3	3	0	0	40	60	100

Course Outcomes:

At the end of the course the student will be able to: -	
CO1	Describe the basic concepts of Environmental Sustainability
CO2	Interpret the key environmental challenges facing the planet
CO3	Analyze a range of potential solutions for achieving environmental sustainability
CO4	Appraise the various dimensions of environmental sustainability.
CO5	Evaluate potential future scenarios and pathways towards sustainability

Detailed Syllabus

Section A

Unit I: Introduction to Environmental Sustainability: Concept of Sustainable Development; Meaning and Importance of environmental sustainability; Environmental Sustainability- Targets and Indicators (Millennium Development Goals, Sustainable Development Goals and Life Cycle Assessment; Environmental ethics and values

(08 Hrs)

Unit II: Environmental Challenges: Climate Change- Causes, impacts, and mitigation strategies; Biodiversity Loss- Threats and conservation efforts, Pollution- Air, water, and soil pollution sources and control measures, Resource Depletion- Sustainable management of natural resources; Population Growth and Consumption Patterns

(08Hrs)

Unit III: Sustainable Solutions: Renewable Energy Sources- Solar, wind, geothermal, etc.; Energy Efficiency and Conservation Strategies; Sustainable Practices in Agriculture and Food Systems; Circular Economy- Reduce, Reuse, Recycle; Green Infrastructure and Urban Sustainability

(08Hrs)

Section B

Unit IV: The Social and Economic Dimensions of Sustainability: Environmental Justice- Equity in environmental decision-making; The role of government policies and regulations; Economic Systems and their impact on the environment; Sustainable Business Practices- Corporate Social Responsibility; The role of individual action and behavior change

(06 Hrs)

Unit V: Building a Sustainable Future: The role of education and public awareness; International cooperation and global environmental challenges; The future of sustainability- Scenarios and pathways; Individual action and empowerment

(06 Hrs)

Textbooks:

S. No.	Name of the Books	Author	Publisher	Edition (Pub. Yr.)
1.	Environmental Science	G. Tyler Miller and Scott S. Kinnison	Brooks/Cole	16 th (2018)
2.	Sustainability: A Comprehensive Introduction	Lauren Baker	Routledge	1 st (2005)

Reference Books:

S. No.	Name of the Books	Author	Publisher	Edition (Pub. Yr.)
1.	Essentials of Environmental Science	Daniel D. Chiras	Jones and Bartlett	10th (2014)