

Course Code	Course Name	Course Type	Cd	L	T	P	Marks		
							Internal	Final Exam	Total
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.

**(08 Hrs)**

**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.

**(08 Hrs)****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 behaviour 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 <sup>th</sup> (2018)
2	Sustainability: A Comprehensive Introduction	Lauren Baker	Routledge	1 <sup>st</sup> (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	10 <sup>th</sup> (2014)