COURSE TITLE	**ENVIRONMENTAL SCIENCE**
COURSE CODE	**05FN0305**
COURSE CREDITS	**2**

Objective:

1 Understand the individual role in Environment safety and pollution

2 Develop sensitivity of human population explosion & information technology welfare programs

Course Outcomes: After completion of this course, student will be able to:

1 Understand and realize the multi-disciplinary nature of the environment science & relationship between man and environment

2 Understand the relevance and importance & protection of the natural resources in the sustenance of life on earth and living standard

3 Comprehend the importance & responsibility of environment protection control measure

4 Develop sensitivity to protect environment

5 Understand individual responsibility for environment

Pre-requisite of course:NA

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
2	0	0	50	30	20	0	0

Contents : Unit	Topics	Contact Hours
1	**The Multidisciplinary nature of environmental studies** Basic Introduction of Environment and environment studies., Definition, Scope and importance, Need for public awareness	5

DR. SUNIL LALCHAND BAJEJA
Digitally signed by (Name of HOD)

DR. R SRIDARAN
Digitally signed by (Name of Dean/ Principal)

Contents : Unit	Topics	Contact Hours
2	**Natural Resources** Renewable and non-renewable resources, Forest resources: Use and Over-exploitation, Timber extraction, mining, dams and their effects on forest and tribal people, Water resources: Use and, Over–utilization of surface and ground water, floods, drought, conflicts over water, dams benefits and problems, Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources., Food resources: World food problems, changes caused by agriculture and overgrazing,, effects of modern agriculture,, fertilizer-pesticide problems,, water logging,, salinity., Energy resources: Growing energy needs,, renewable and non-renewable energy sources,, use of alternate energy sources., Land resources: Land as a resource,, land degradation,, man induced landslides, soil erosion and desertification., -Role of an individual in conservation of natural resources	7
3	**Ecosystems & Environment Pollution** Concept of an ecosystem, Structure and function of an ecosystem, Producers, consumers and decomposers, Energy flow in the ecosystem, Causes& effects and control measures of environmental pollution , air pollution, water pollution, Soil pollution, Marine pollution, Noise pollution, Nuclear pollution, Thermal pollution	12
4	**Human Population and the Environment** Population growth, variations among nations, Population explosion-Family welfare Programme, Environment and human health	6
Total Hours		**30**

Textbook :

1 Environmental Science: Towards a Sustainable Future, Richard T. Wright, Pearson, 2013

2 Environmental Studies, Benny Joseph, Tata McGraw-Hill, 2009

References:

1 Environmental Science: A Global Concern, Environmental Science: A Global Concern, William P. Cunningham, McGraw-Hill Education, 2017

2 Principles of Environmental Science, Principles of Environmental Science, William P. Cunningham, McGraw-Hill Education, 2013

Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery

DR. SUNIL LALCHAND BAJEJA
Digitally signed by (Name of HOD)

DR. R SRIDARAN
Digitally signed by (Name of Dean/ Principal)

Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking / Creative
20.00	30.00	25.00	15.00	10.00	0.00

Instructional Method:

1 Board Work

2 PPT

Supplementary Resources:

1 https://www.ugc.ac.in/oldpdf/modelcurriculum/env.pdf

DR. SUNIL LALCHAND BAJEJA

Digitally signed by (Name of HOD)

DR. R SRIDARAN

Digitally signed by (Name of Dean/ Principal)