



KAMARAJ COLLEGE

(AUTONOMOUS)

Accredited with A+ Grade by NAAC

Among Top 150 Colleges in India - NIRF Ranking 2025

இந்து நாடார் சங்கங்களால் 1966-ல் தொடங்கப்பட்ட கல்லூரி
(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)
THOOTHUKUDI - 628 003.



Common Syllabus

Environmental Studies

Semester - IV

SYLLABUS

(for the students those who joined from the academic year 2025-2026)



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Part – IV

Common Syllabus

Environmental Studies

Semester - IV

SYLLABUS

(for the students those who joined from the academic year 2025-2026)

Second Year – Semester – IV

Environmental Studies

Title of the Course		Environmental Studies			
Course Type		Indian Knowledge System (IKS)			
Course Code		25UEVS41			
Year	II	Semester	IV	Credits	2
Instructional Hours Per week		Lecture	Tutorial	Lab Practices	Total
		1	1	--	2

Unit – I

The Multidisciplinary Nature of Environmental Studies:

Definition, Scope and importance

Natural resources and associated problems:

1. Forest resources: Use and over-exploitation, deforestation, timber extraction, dams and their effects on forests and tribal people.
2. Water resources: Use and over-utilization of surface and ground water, floods, drought, dams-benefits and problems, water conservation and watershed management.
3. Land resources: Land as a resources, Land degradation, man-induced landslides, soil erosion and desertification.

Unit – II

Ecosystems:

1. Forest Ecosystem
2. Grassland Ecosystem
3. Aquatic Ecosystem (Ponds, Rivers, Oceans, Estuaries)

Energy flow in the ecosystem

Food Chains, Food Webs and Ecological Pyramids.

Unit – III

Biodiversity and its conservation:

1. Introduction Definition: – Types of Biodiversity - Genetic, species and ecosystem diversity.
2. Values of Biodiversity
3. India as a mega-diversity nation
4. Hot-Spots of biodiversity Threats to biodiversity
5. Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.

Unit – IV

Environmental Pollution:

Definition – Causes, effects and control measures of:-

- a) Air Pollution
 - b) Water Pollution
 - c) Soil Pollution
 - d) Noise Pollution
- Disaster Management: Floods, cyclone and landslides.

Unit – V

1. Climatic change, global warming, acid rain, ozone depletion.
2. Environment Protection Act
3. Air (Prevention and Control of Pollution) Act
4. Water (Prevention and Control of Pollution) Act
5. Wildlife Protection Act
6. Forest Conservation Act

References:

1. G.S. Vijalakshmi, A.G. Murugesan and N.Sukumaran. 2006. Basics of Environmental Science, Manonmaniam Sundaranar University Publications, Tirunelveli, pp.160.
2. Agarwal. K.C. 2001 Environmental Biology, Nidi Publications Limited, Bikaner.
3. A.K.De.1999. Environmental Chemistry, Wiley Eastern Limited, India.
4. Jadhav,H. and Bhosale, V.M.1995 Environmental Protection and Laws, Himalaya Publishing House, Delhi. pp284.
5. Odum, E.P.1971. Fundamentals of Ecology, W.B. Saunders Co., USA. Pp.574

Mapping With Programme Outcomes and Programme Specific Outcomes

CO/PO	P01	P02	P03	P04	P05	P06	P07	P08
C01	2	2	2	2	2	3	2	3
C02	2	3	3	2	3	3	2	2
C03	2	3	3	3	3	3	3	3
C04	2	2	3	3	3	2	3	3
C05	2	3	3	3	3	2	2	2

S-Strong = 3 M-Medium = 2 L-Low =1

CO/PSO	PS01	PS02	PS03	PS04	PS05
C01	2	2	2	2	2
C02	2	3	3	2	3
C03	2	3	3	3	3
C04	2	2	3	3	3
C05	2	3	3	3	3

Blue Print – End Semester Examinations Semester – IV

Class: U.G.

Time: 3 Hours

Max. Marks: 75

Section A

(10 x 1 = 10)

Answer all questions.

Choose the correct answer. (With four options)

	Unit I	Unit II	Unit III	Unit IV	Unit V
Question Nos.	1 & 2	3 & 4	5 & 6	7 & 8	9 & 10

Section B

(5 x 5 = 25)

Answer all questions choosing either (a) or (b).

Answer should not exceed 250 words

	Unit I	Unit II	Unit III	Unit IV	Unit V
Question Nos.	11 (a) & 11 (b)	12 (a) & 12 (b)	13 (a) & 13 (b)	14 (a) & 14 (b)	15 (a) & 15 (b)

Section C

(5 x 8 = 40)

Answer all questions choosing either (a) or (b).

Answer should not exceed 500 words

	Unit I	Unit II	Unit III	Unit IV	Unit V
Question Nos.	16 (a) & 16 (b)	17 (a) & 17 (b)	18 (a) & 18 (b)	19 (a) & 19 (b)	20 (a) & 20 (b)