Shivagangotri, Davanagere – 577 007, Karnataka, INDIA

Prof Govindappa M

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Chairman-BOS-UG

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7338601980

No. DUD/DOS-BOS-UG/ 2025-26 755

19 July 2025

The Registrar

Davangere University Davangere-577 007

Sir,

Sub: Submission of Compulsory Subject Environmental Studies subject for degree students-reg.

With reference to the above subject, herewith we are submitting compulsory subject Environmental Studies for degree students. The syllabus was discussed in the BOS meeting and approved by all the members and syllabus was framed according to UGC regulations and Supreme Court order. The syllabus was designed for 56 hours (3 credits with 4hours/week). Kindly consider the same and do the needful.

Thanking you

(Prof Govindappa M)
Chairman-BOS-UGAS in Botany - UG-BOS-EVS
Department of Studies in Environmental Science

Davangere University) Davanagere, Karnataka, India

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## STATE EDUCATION POLICY-2025-26 (SEP-2024)

# ENVIRONMENTAL STUDIES Syllabus of 1st and 2nd Semester

**Submitted** 

CHAIRMAN - BOS-UG-BUS to

Department of Studies in Botany
Davangere University
Avangere University Davangere-577007

Davangere-577 007

# Department of Studies in Environmental science Davangere University Common Paper Structure

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uation arks)	Tota	100				
m/Evah ern (Ma	Exam	20 80				
Exa patt	IA	20				
Durati Exam/Evaluation on of pattern (Marks)	the	3				
ional er week	Theory Practical					
Instructional Hours per week	Theory	4				
Credits Assigned		3				
Course Title		<b>Environmental Studies</b>	(Common paper for	1 semester BA/ B.sc/B.CA	and	2nd Semester BBM/B.com
Course Code						
Sem Course Category						
Sem		•				

## UNIVERSITY GRANTS COMMISSIONS ENVIRONMENTAL STUDIES COMPULSORY COURSE/ CONSTITUTIONAL VALUES

1. This module consists of 4 units, covering 56 lecture hours which are classroom based and field work intended to create awareness, enhance knowledge, develop skills and attitudes necessary to understand the Environment in its totality and enables students to participate proactively for the cause of the environment. Environmental Studies is made compulsory core module syllabus framed by UGC for all the Indian Universities/Colleges as per the directions given by the Honourable Supreme Court, which believed that, conservation of environment should be a national way of life and to be included into the education process. As per Davangere University regulations, State Educational Policy and members of Board of Studies it is proposed to implement the details listed in the tabular column below, **mandatorily**.

Subject	ENVIRONMENTAL STUDIES (COMPULSORY COURSE/ CONSTITUTIONAL VALUES)	Semester
Course	BA /B.Sc./ B.C.A	I
	B.Com. /B.B.M	II

- 2. This pattern helps in distributing the workload of teachers of Environmental Studies to both I and II semesters enabling the distribution of the teaching workload of an institution for full academic year; ensures distribution of examinations into two semesters; also provide scope for a fulltime teacher of the subject.
- 3. Eligibility to teach Environmental Studies: A candidate with minimum qualifications of M.Sc. in Environmental Science subject only is eligible to teach Environmental Studies at the under graduate level in all Autonomous, Government, Aided and Private Colleges which are affiliated to Davangere University. Preference may be given to candidates with UGC-NET/KSET/Ph.D. in Environmental Science.
- 4. However, when such candidate is not available, teachers of the subjects listed below are to be preferred to teach ONLY ENVIRONMENTAL STUDIES paper in the following order:
  - Biological Sciences: Botany/Zoology/Microbiology/Biotechnology/Life Sciences
  - Chemical Sciences and Earth Sciences: Chemistry/Geology/Earth Sciences
- 5. **Pattern of Examination:** Total marks 100 (Internal Assessment 20 marks and Final Examination 80 marks).

#### I. Summative Marks Distribution

Formative Assessment			
Assessment Occasion/Type Weighting in Mar			
Assessment-1	10		
Assessment -2	10		
Total	20		

## II. Term End Examination: Paper will be for maximum of 80 marks.

Section – A: short Questions

Section - B: Medium Answer Questions

Section - C: Long Answer Questions

6. Duration of the examination: 3 hour

7. Teaching hours and credits: 4 hours of teaching per week and 3 credits.

### **Environmental Studies I/II Semester**

Subject	<b>Environmental Studies</b>	Semester	I/II
Number hr/week	4 hours	Total hours	56
Duration of the	3 hours	Credits	3
exam			

Unit- 1	Introduction to Environmental Studies: Multidisciplinary nature of environmental studies, Scope and importance; Concept of sustainability and sustainable development.  Ecosystem: Structure and function of ecosystem; Energy flow in	12
	an ecosystem: food chains, food webs and ecological succession.  Case studies of the following ecosystems:  a) Forest ecosystem,	
	b) Grassland ecosystem,	
	c) Desert ecosystem,	
	Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)	
Unit- 2	Natural Resources: Renewable and Non-Renewable Resources: Land resources and land-use change; Land degradation, Soil erosion, and desertification.	12
	<b>Deforestation</b> : Causes and impacts due to mining, dam building on environment, forests, biodiversity, and tribal populations.	
	<b>Water</b> : Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter-state).	
·	<b>Energy resources</b> : Renewable and non-renewable energy sources, use of alternate energy sources, growing energy needs, case studies.	
	Biodiversity and Conservation: Levels of biological diversity: Genetic, species and ecosystem diversity; Biogeographic zones of India Biodiversity patterns and global biodiversity hot spots.	
	India as a mega-biodiversity nation; Endangered and endemic species of India.	
	<b>Threats to biodiversity</b> : Habitat loss, poaching of wildlife, manwildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.	
	<b>Ecosystem and biodiversity services</b> : Ecological, economic, social, ethical, aesthetic and Informational value.	
Unit-3	Environmental Pollution: Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution, Nuclear hazards and human health risks, Solid waste management, Control measures of urban and industrial waste Pollution, case studies.	12
-	Environmental Policies & Practices: Climate change, global warming, ozone layer depletion, acid rain and impacts on human	

communities and agriculture. Environmental Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD). Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context Human Communities and the Environment: Human 12 Unit-4 environment, human population growth: Impacts on health and welfare. Resettlement and rehabilitation of project affected persons; case studies. **Disaster management**: floods, earthquake, cyclones and landslides. Environmental movements: Chipko, Silent valley, Bishnois of Rajasthan Environmental ethics: Role of Indian and other religions and cultures in environmental conservation Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi). Field work • Visit to an area to document environmental assets: 08 river/forest/flora/fauna, etc. • Visit to a local polluted site- urban/Rural/Industrial/ Agricultural. • Study of common plants, insects, birds, and basic principles of identification. • Study of simple ecosystems – pond, river, Delhi ridge, etc.

#### References

- 1. Bharucha, E. (2015). Textbook of Environmental Studies.
- 2. Carson, R. (2002). Silent Spring. Houghton Mifflin Harcourt.
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- 7. McCully, P. (1996). Rivers no more: the environmental effects of dams (pp. 29-64). Zed Books.
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- 10. Odum, E.P., Odum, H.T. & Andrews, J. (1971). Fundamentals of Ecology.

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- 11. Pepper, I.L, Gerba, C.P. & Brusseau, M.L. (2011). Environmental and Pollution Science. Academic Press.
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# (Semester Scheme, New Syllabus: 2025-26) Subject - Environmental Studies Paper Code: 62002

Time: 3 Hours		Max Marks: 80
Instructions to the Students		
1. All sections are comp	oulsory	
	ed diagrams wherever necessary	
	SECTION-A	(27742, 22)
1. Answer <b>ALL</b> the follow	wing questions	$(2 \times 10 = 20)$
a)		
b)		
c)		
d)		
e)		
f)		
g)		
h)		
i)		
j)		
	SECTION-B	
Answer any SIX of the follow	ing	$(5 \times 6 = 30)$
2.	_	
3.		
4.		
5.		
6.		
7⋅	!	
8.		
9.		
	SECTION-C	
Answer any <b>THREE</b> of the fo		$(10 \times 3 = 30)$
10.	nowing	(10 kg - 30)
11.		
12.		
13.		
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#### **Department of Studies in Environmental Science**

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No. DUD/DOS-BOS-UG/ 2025-26

19 July 2025

#### **UG-BOS Proceedings**

The UG-BOS meeting was conducted on 19<sup>th</sup> July 2024 in the Department of Studies in Environmental science, Davangere University, Shivagangotri at 11 am to discuss and finalize SEP-2024 Compulsory Environmental Studies syllabus for degree students and the following BOS members were present as follows;

Sl. No.	Members		Signature
1	Prof Govindappa M	Chairman	
2	Dr. Veeresh SJ	Internal member	ر کی ایکار
3	Dr. Sharadadevi Kallimani	Internal member	D::
4	Dr. S.Thirumala	Internal member	2 Simily
5	Prof Narayana J	External member	Approved through

The UG-BOS Environmental Studies chairman welcomed the members, briefed the agendas and approved the following,

- All the members approved the 1<sup>st</sup> and 2<sup>nd</sup> semester SEP-2024 Compulsory Subject Environmental Studies syllabus and approved.
- The syllabus is designed for 56 hours (3 credits with 4hours/week) as per the UGC and supreme court order.
- The question paper pattern was discussed (made according to SEP-2024 format) and approved.
- The allocations of credits and internal marks verified and approved.
- The practical internal marks verified (attendance-05 and record-05) and approved.
- Dr Veeresh SJ submitted the vote of thanks.

(Prof Govindappa M)
Chairman-BOS-LUGRMAN - BOS-OG-OG-EVS
Department of Studies in Botany
Department of Studies in Environmental Science
Davangere University, Davanagere, Karnataka, India



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(Prof Govindappa M)
Chairman BOS-UGAN - BOS - UG - BOS
Department of Studies in Botany Department of Studies in Environmental Science

Davangere Liniversity Davanagere, Karnataka, India