

# **DEPARTMENT OF BOTANY**

## **COURSE CURRICULUM & MARKING SCHEME**

**B.Sc./B.A./B.Com. IV & VI Semester**  
**Environmental Studies & Human Rights**  
(Based on Choice Based Credit System)

**SESSION : 2024-25**



**ESTD : 1958**

**GOVT. V.Y.T. PG AUTONOMOUS COLLEGE,  
DURG, 491001 (C.G.)**

(Former Name – Govt. Arts & Science College, Durg)

NAAC Accredited Grade A<sup>+</sup>, College with CPE - Phase III (UGC), STAR COLLEGE (DBT)

Phone : 0788-2212030

Website - [www.govtsciencecollegedurg.ac.in](http://www.govtsciencecollegedurg.ac.in), Email – [autonomousdurg2013@gmail.com](mailto:autonomousdurg2013@gmail.com)

**GOVT. V.Y.T. PG. AUTONOMOUS COLLEGE, DURG**

**Syllabus and Marking Scheme for B.Sc./B.A./B.Com/BCA**

**Paper Code - 0828**

**Semester- III/IV**

**Session: 2024-2025**

**ENVIRONMENTAL STUDIES AND HUMAN RIGHTS**

Semester	Title of the Paper	Marks Allotted in Theory		Marks Allotted in Internal Assessment	
		Max	Min	Max	Min
Third Semester	Ability Enhancement Course (AEC) Environmental Studies and Human Rights (02 Credit)	40	16	10	04
Fourth Semester	Project Work (02 Credit)	50	20		

**80% Theory and 20% Assignment OR as per new Ordinance**



**GOVT. V.Y.T. PG AUTONOMOUS COLLEGE, DURG (C.G.)**

**B.Sc./ B.A./ B. Com/BCA**

**Semester- III, Session – 2024-25**

**Paper Code – 0828 (02 Credit)**

**Ability Enhancement Course (AEC)**

**ENVIRONMENTAL STUDIES AND HUMAN RIGHTS**

**M.M. 40**

**UNIT-I**

**Multi Disciplinary Nature of the Environmental Studies**

Definition, Scope and Importance Natural Resources: Renewable and Non-renewable Resources

- a) Forest resources: Use and over-exploitation, deforestation, Timber extraction, mining, dams and their effects on forests and tribal people and relevant forest Act.
- b) Water resources: Use and over-utilization of surface and ground water, Dams benefits and problems and relevant Act.
- c) Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources.
- d) Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources.

**UNIT-II**

**Ecosystem**

**(a) Concept, Structure and Function of an ecosystem**

- Producers, consumers and decomposers.
- Food chains, food webs and ecological pyramids.
- Ecosystem: Introduction, Types, Characteristics Features, Structure and Function of Forest, Desert and Aquatic Ecosystem.

**(b) Biodiversity and its Conservation:**

- India as mega-diversity nation, Hot spots of biodiversity, Endangered and endemic species of India.
- Conservation of biodiversity: In situ and Ex-situ conservation of biodiversity.

**UNIT- III**

- Causes, effect and control measures of Air, water, soil, noise and nuclear pollution.
- Solid waste management: Causes, effects and control measures of urban and industrial wastes.
- Water conservation, rain water harvesting, watershed management.
- Climate change, global warming, acid rain, ozone layer depletion and nuclear accidents.



#### UNIT- IV

- Historical development and concept of Human Rights, Definition and Classification of Human Rights.
- Protection of Human Rights under the UNO Charter, protection of Human Rights under the Universal Declaration of Human Rights, 1948, Convention on the Rights of the Child, 1989.

#### UNIT- V

- Human Rights under the Constitution of India, Fundamental Rights under the Constitution of India, Directive Principles of State policy under the Constitution of India.
- Protection of Human Rights under the Human Rights Act, 1993- National Human Rights Commission, State Human Rights Commission and Human Rights court in India.
- Fundamental Duties under the Constitution of India.




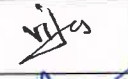



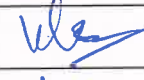




#### Reference/ Books Recommended

1. SK Kapoor- Human rights under International Law and Indian Law.
2. HO Agrawal- International Law and Human Rights
3. J.N. Pandey - Constitutional Law of India
4. Agarwal K.C. 2001 Environmental Biology, Nidi pub. Ltd. Bikaner
5. Bharucha Erach, the Biodiversity of India, Mapin pub. Ltd. Ahmedabad 380013, India, Bruinner R.C. 1989, Hazardous Waste Incineration. McGraw Hill Inc. 480p
6. Clark R.S. Marine pollution, Clarendon press Oxford (TB).
7. Cuninghame, W.P. Cooper. T.H. Gorhani, E & Hepworth.M.T, 200 Dr. A.K.- Environmental Chemistry. Wiley Eastern Ltd.
8. Hawkins R.E. Encyclopedia of Indian Natural History, Bombay Natural History Society, Mumbai(R).
9. Heywood, V.H. & Watson, T.T. 1995 Global Biodiversity Assessment, Cambridge Univ. Press 1140p.
10. Jadhav H. & Bhosale, V.H. 1995 Environmental Protection and Law. Himalaya Pub. House, Delhi 284p.
11. Miller T.G.Jr. Environment Science, Wadsworth publication co. (TB).
12. Odum E.P. 1971, Fundamentals of Ecology, W.B. Saunders Co. USA, 574p
13. Rao M.N. & Datta, A.K. 1987, Waste water treatment. Oxford & IBH Pub. Co. Pvt. Ltd 345p.



14. Sharma B.K. 2001, Environmental chemistry, Goel pub. House, Meerut
15. Survey of the Environment, The Hindu (M).
16. Townsend C. Harper J. And Michael Begon, Essentials of Ecology, Blackwell Science (TB).
17. Wanger K.D.1998, Environmental Management. W.B. Saunders Co. Philadelphia, USA.

**Name and Signatures of Members Board of Studies**

S. No.	Category	Name of Nominated Members	Signature
1.	Chairperson	Dr. Ranjana Shrivastava	
2.	Members	1. Dr. G. S. Thakur	
		2. Dr. Shriram Kunjam	
		3. Dr. Satish Kumar Sen	
		4. Dr. Vijay Laxmi Naidu	
		5. Mr. Motiram Sahu	
		6. Dr. Rajeshwari Prabha Lahare	
3.	Subject specialist	1. Prof. P.C. Panda Retd. Professor Borsi Durg C.G.)	
		2. Dr. N.B. Singh (Govt. N.PG. Science College Raipur C.G.)	
4.	VC Nominated member	Dr. Aruna Shrivastava (Govt. D.B. Girls PG College Raipur C.G.)	
5.	Corporate/ Industrial area Representative	Shri Manish Jain (Apollo College, Durg C.G.)	
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B.Sc./ B.A./ B. Com/BCA

Semester- IV

Ability Enhancement Course (AEC)

Environmental Studies and Human Rights

Project Work

(02 Credit)

M.M. 50

पर्यावरण प्रोजेक्ट हेतु शीर्षक

(30)

1. आपके आस-पास के परिवेश में जल प्रदूषण की समस्या प्रभाव एवं समाधान।
2. किसी स्थल पर सौर ऊर्जा का अनुप्रयोग तथा उसका प्रभाव।
3. आपके क्षेत्र में पारिस्थितिकी तंत्र में हुए उल्लेखनीय परिवर्तन एवं प्रभाव।
4. पर्यावरणीय प्रदूषण के केस को रिपोर्ट करने में मोबाइल तकनीक का महत्व।
5. सूखा एवं इसका मृदा पर प्रभाव एवं समाधान।
6. आस-पास हेतु रेनवॉटर हार्वेस्टिंग प्रणाली स्थापित करने हेतु योजना एवं प्रभाव।
7. वनोन्मूलन के दुष्प्रभाव एवं दुष्प्रभावों को कम करने हेतु 10 उपाय।
8. अप्राकृतिक तरीकों से (Genetically Modified Vegetables ) विकसित की गई सब्जियों का दुष्प्रभाव एवं समाधान।
9. पक्षियों के पलायन का पर्यावरण पर प्रभाव एवं समाधान।
10. पर्यावरण संरक्षण के विकास में मोबाइल तकनीकी का अनुप्रयोग।
11. साझा सवारी-पर्यावरण संरक्षण हेतु वरदान।
12. जल का संधृत उपयोग-वर्तमान समाज की आवश्यकता।
13. वृक्षारोपण अभियान-पर्यावरण संरक्षण की दिशा में एक कदम।
14. शोर प्रदूषण-मानव स्वास्थ्य हेतु खतरा एवं समाधान।
15. पर्यावरण अध्ययन प्रोजेक्ट की आवश्यकता एवं इसका महत्व।
16. नवीन करने योग्य ऊर्जा संसाधन-वर्तमान समाज की आवश्यकता।
17. ऊर्जा के गैर पारम्परिक स्रोत-वर्तमान समय की मांग।
18. पटाखों का सीमित उपयोग-अच्छा या बुरा सुझाव।
19. नदी सफाई अभियान-उपयोगी अथवा दिखावा सुझाव।
20. आपके क्षेत्र की प्रमुख पर्यावरणीय समस्याएँ एवं उसका निदान।
21. प्लास्टिक कचरा की सफाई एवं जागरूकता।
22. गाजर घास उन्मुलन एवं उसके दुष्प्रभाव की जानकारी एवं समाधान।
23. ठोस अपशिष्ट प्रबंधन, आस-पास होटल, अस्पताल, सब्जी बाजार आदि।
24. पर्यटक द्वारा पर्यटक स्थलों पर पर्यावरणीय दुष्प्रभाव एवं समाधान।
25. सामाजिक उत्सव एवं पर्यावरण प्रदूषण।
26. नदी का तटबंध कटाव एवं इसके दुष्परिणाम।









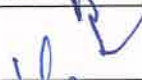




## TOPICS FOR ENVIRONMENTAL STUDIES PROJECT

1. Problem of water pollution in your surroundings its effect and remedy.
2. Use of solar energy in any place and its impact.
3. Observable changes in the Ecosystem in your area and its effect.
4. Importance of mobile Technology for reporting cases of environmental pollution.
5. Draught and its impact on soil and its remedy.
6. Plan of Rainwater harvesting strategy in the neighborhood and its effect.
7. Harmful effects of deforestation and 10 ways to mitigate the effects.
8. Adverse effect of genetically modified vegetation and its remedy.
9. Environmental impact due to migration of birds and its remedy.
10. Mobile applications to develop environmental conservation.
11. Pool riding, a boon for Environmental Conservation.
12. Conjunctive use of Water-present need of the Society.
13. Plantation Campaigns a step towards environmental conservation.
14. Noisy Environment-Threat to Human Health and its remedy.
15. Necessity of Environmental studies project and its importance.
16. Renewable Energy Sources-present need of society.
17. Alternate Sources of Energy-Need of the hour.
18. Minimum use of Fire crackers-good or bad suggestions.
19. River cleaning programme-Worth or propaganda suggestions.
20. Major environmental problems in your area and its remedies.
21. Cleaning and awareness of Plastic Waste.
22. Eradication of parthenium (Gajar grass), its harmful effects and remedy.
23. Solid waste management nearby hotels, hospitals, vegetable markets, etc.
24. Environmental harm by tourists at tourist place and its remedy.
25. Social Celebrations and environmental pollution; its remedy.
26. River bank erosion and its ill consequences.

**Note:** Photographs using in Project Report should be Geo Tag and students must be submitted Certificate of Local Authority or recognised person during project work (i.e. Parshad, Sarpanch, Tehsildar and Head of Institution).



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