


UNIVERSITY OF MYSORE
Estd. 1916

Vishwavidyalaya Karyasoudha
Crawford Hall, Mysuru- 570 005

No.AC2(S)/55/2024-25

Dated: 05.08.2024

Notification

Sub:-Syllabus and Scheme of Examinations of Constitutional Values with reference to Environmental Studies (UG) programme (I & II Semester) from the Academic year 2024-25.

Ref:- 1. Decision of Board of Studies in Environmental Science (CB) meeting held on 10.06.2024.


2. Orders of the Hon'ble Vice-Chancellor dated: 05.08.2024.

The Board of Studies in Environmental Science (CB) which met on 10-06-2024 has resolved to recommend and approved the Syllabus and Scheme of examinations of Environmental Studies for UG programme (I & II Semester) with effect from the Academic year 2024-25.

Pending approval of the Academic Council meeting the above said Syllabus and Scheme of examinations are hereby notified.

The Syllabus and Scheme of Examinations content may be downloaded from the University Website i.e., www.uni-mysore.ac.in.

Draft approved by the Registrar


Deputy Registrar(Academic)
Deputy Registrar (Academic)
University of Mysore
Mysore-570 005

To;

1. All the Principal of affiliated Colleges of University of Mysore, Mysore.
2. The Registrar (Evaluation), University of Mysore, Mysuru.
3. The Chairman, BOS/DOS in Environmental Science, Manasagangothri, Mysore.
4. The Dean, Faculty of Science & Technology, DOS in Mathematics, MGM.
5. The Director, Distance Education Programme, Moulya Bhavan, Manasagangothri, Mysuru.
6. The Director, PMEB, Manasagangothri, Mysore.
7. Director, College Development Council, Manasagangothri, Mysore.
8. The Deputy Registrar/Assistant Registrar/Superintendent, Administrative Branch and Examination Branch, University of Mysore, Mysuru.
9. The PA to Vice-Chancellor/ Registrar/ Registrar (Evaluation), University of Mysore, Mysuru.
10. Office Copy.

University of Mysore

**Environmental Studies for degree courses
(I and II Semester)**

**Revised Syllabus
2024-2025 onwards**

**Department of Studies in Environmental Science
University of Mysore
Mysore – 570 005**

2024-2025

**Environmental Studies for Bachelor degree courses of University of
Mysore
Compulsory course / Constitutional values
I/II Semester**

	Content of AECC – Environmental Studies 2 Credits with 03 Hours of Teaching per week	45 hours
Unit 1	Introduction to Environmental Studies	
	Multidisciplinary nature of environmental studies Scope and importance; Concept of sustainability and sustainable development.	02
Unit 2	Ecosystems	
	Ecosystem - Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems: <ul style="list-style-type: none"> a) Forest ecosystem, b) Grassland ecosystem, c) Desert ecosystem, Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)	06
Unit 3	Natural Resources: Renewable and Non-Renewable Resources	
	Land resources and land-use change; Land degradation, soil erosion and desertification. Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations. Water: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter-state). Energy resources: Renewable and non-renewable energy sources, use of alternate energy sources, growing energy needs, case studies.	07
Unit 4	Biodiversity and Conservation	08
	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. Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity. Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.	

Unit 5	Environmental Pollution	07
	<p>Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution,</p> <p>Nuclear hazards and human health risks</p> <p>Solid waste management, Control measures of urban and industrial waste</p> <p>Pollution case studies.</p>	
Unit 6	Environmental Policies & Practices	07
	<p>Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture.</p> <p>Environment 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).</p> <p>Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context</p>	
Unit 7	Human Communities and the Environment	06
	<p>Human population growth: Impacts on environment, human health and welfare.</p> <p>Resettlement and rehabilitation of project affected persons; case studies.</p> <p>Disaster management: floods, earthquake, cyclones and landslides.</p> <p>Environmental movements: Chipko, Silent valley, Bishnoi of Rajasthan</p> <p>Environmental ethics: Role of Indian and other religions and cultures in environmental conservation</p> <p>Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi).</p>	
Unit 8	Field work	02

Reference:	<ol style="list-style-type: none"> 1. Carson, R. (2002). Silent Spring. Houghton Mifflin Harcourt. 2. Gadgil, M., & Guha, R. (1993). This Fissured Land: An Ecological History of India. Univ. of California Press. 3. Gleeson, B. and Low, N. (eds.) (1999). Global Ethics and Environment, London, Routledge. 4. Gleick, P. H. (1993). Water in Crisis. Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute, Oxford Univ. Press. 5. Groom, Martha J., Gary K. Meffe, and Carl Ronald Carroll. (2006). Principles of Conservation Biology. Sunderland: Sinauer
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	<p>Associates.</p> <ol style="list-style-type: none"> 7. Grumbine, R. Edward, and Pandit, M.K. (2013). Threats from India's Himalayadams. Science, 339: 36-37. 8. McCully, P. (1996). Rivers no more: the environmental effects of dams (pp. 29-64). Zed Books. 9. McNeill, John R. (2000). Something New Under the Sun: An EnvironmentalHistory of the Twentieth Century. 10. Nandini, N. (2019). A text book on Environmental Studies (AECC). Sapna BookHouse, Bengaluru. 11. Odum, E.P., Odum, H.T. & Andrews, J. (1971). Fundamentals of Ecology. Philadelphia: Saunders. 12. Pepper, I.L, Gerba, C.P. & Brusseau, M.L. (2011). Environmental and PollutionScience. Academic Press. 13. Rao, M.N. & Datta, A.K. (1987). Waste Water Treatment. Oxford and IBHPublishing Co. Pvt. Ltd. 14. Raven, P.H., Hassenzahl, D.M. & Berg, L.R. (2012). Environment. 8th edition. JohnWiley & Sons. 15. Rosencranz, A., Divan, S., & Noble, M. L. (2001). Environmental law and policy inIndia. Tripathi 1992. 16. Sengupta, R. (2003). Ecology and economics: An approach to sustainabledevelopment. OUP. 17. Singh, J.S., Singh, S.P. and Gupta, S.R. (2014). Ecology, Environmental Science andConservation. S. Chand Publishing, New Delhi. 18. Sodhi, N.S., Gibson, L. & Raven, P.H. (eds). (2013). Conservation Biology: Voicesfrom the Tropics. John Wiley & Sons. 19. Thapar, V. (1998). Land of the Tiger: A Natural History of the Indian Subcontinent. Warren, C. E. (1971). Biology and Water Pollution Control. WBSaunders. 20. Wilson, E. O. (2006). The Creation: An appeal to save life on earth. New York:Norton. 21. World Commission on Environment and Development. (1987). Our CommonFuture. Oxford University Press.
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(MODEL QUESTION PAPER 1st to 2nd semester)
ENVIRONMENTAL STUDIES
(MAX MARKS: 50 (C₁:5 + C₂:5 + C₃:40))

Time: 2 hrs

Max. Marks: 40

Note: 1. Answer all questions

Draw neat-labeled diagrams and give examples wherever necessary

SECTION A

Answer all the questions

10X 1 =08 marks

1. Answer in one word or a sentence

- a.
- b.
- c.
- d.
- e.
- f.
- g.
- h.

SECTION B

II. Write short notes on any FOUR of the following:

4 X 3 = 12 Marks

- 2.
- 3.
- 4.
- 5.
- 6.

SECTION C

III. Answer any TWO of the following:

2 x 10 = 20 Marks

- 9.
- 10.
- 11.