

मिज़ोरम विश्वविद्यालय
परीक्षाविभाग
आईज़ॉल -796004



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भारतीयसंसदद्वारापारितएटकेअंतर्गत स्थापितएककेन्द्रीयविश्वविद्यालय

A Central University Established by Parliament Act No.8 of 2000

No.Ex/UG/1-38/23

The 13th February, 2023

To,

The Principal
Constituent & All Affiliated Colleges

Subj: Forwarding of Modified/Revised CBCS Syllabus.

Sir,

I am enclosing herewith Revised UG Syllabus in respect of **Environmental Studies** that has been approved vide Resolution No.AC:40:4(6) of the 40th Meeting of the Academic Council, MZU held on 29th June 2021, and will be effective from the academic session of 2023 onwards.

Yours faithfully,

(LONGJAM AJAY SINGH)
Assistant Registrar (Exam UG)

Revised Syllabus of Foundation Course for IV Semester (UG), Mizoram University

ENVIRONMENTAL STUDIES

Full Marks- [75+25]

Course-I/ FC/EVS – IV

Credits: 5

Unit-I: Introduction to Environmental Studies and Natural Resources

Scope and importance; Multidisciplinary nature; Classification of natural resources; Concept of renewable and non-renewable resources; Forest resources; Energy resources; Water resources; Land resources; Food resources.

Unit-II: Ecosystem

Concept of an ecosystem; Structure and function of an ecosystem; Major ecosystems (terrestrial, aquatic, artificial); Energy flow; Food chain and food web; Ecological succession.

Unit-III: Biodiversity and Conservation

Definition, pattern and levels of biodiversity; Value of biodiversity; India as a mega-diverse nation; Hotspot of biodiversity; Causes and consequences of biodiversity loss; Conservation of biodiversity- *In-situ* and *Ex-situ*.

Unit-IV: Environmental Pollution

Definition and types of environmental pollution; Causes, effects, and control of pollution (air, water, soil, noise); Solid waste management: Causes, effects and control measures of urban and industrial wastes.

Unit-V: Social Issues, Environment and Development

Concept of sustainable development; Water conservation, rain water harvesting, Climate change- global warming, ozone layer depletion, acid rain; Environmental movements- Chipko, Appiko, Silent valley projects.

Suggested Readings:

1. Basu, M. and Xavier, S. 2018. Fundamental of Environmental Studies. Cambridge University Press, Kolkata.
2. Bharucha, E. 2015. Text Book of Environmental Studies. University Press (India) Pvt. Ltd., Hyderabad
3. Vanramliana *et al.*, 2015. A text book of Environmental Science. Scientific Book Centre, Guwahati.
4. Daniel, D. C. 2014. Environmental Science. Jones and Bartlett Publishers, London.
5. Prasad, G. 2018. Handbook of Environmental Science. Discovery Publishing House, New Delhi
6. Rajagopalan. 2019. Environmental Studies: from crisis to cure. Oxford University Press, New Delhi.
7. Saha, T.K. 2013. Ecology and Environmental Biology. Books & Allied (P) Ltd. Kolkata.
8. Santra, S.C. 2018. Environmental Science. New Central Book Agency (P) Ltd., Kolkata.
9. Sharma, P.D. 2017. Ecology and Environment. (10th Revised Edition). Rastogi Publication, Meerut.
10. Allaby, M. 2019. Basics of Environmental Science, Routledge, London
11. Odum, E.P. 2019. Fundamentals of Ecology, Saunders, Minnesota