



UG- LIFE SKILL COURSE

ENVIRONMENTAL EDUCATION (EE) (Mandatory)

(w.e.f. 2020-2021 A.Y.)

Semester	Course Code (LS)	Course Title	Hrs/Sem	Hrs/wk	Credits	Sem End Exam (2 Hrs)
III	Life skill course	Environmental Education(EE)	30	2	2	50 Marks

Course objective: A Generic Course intended to create awareness that the life of human beings is an integral part of environment and to inculcate the skills required to protect environment from all sides.

Learning outcomes: On completion of this course the students will be able to

- Understand the nature, components of an ecosystem and that humans are an integral part of nature.
- Realize the importance of environment, the goods and services of a healthy biodiversity, dependence of humans on environment.
- Evaluate the ways and ill effects of destruction of environment, population explosion on ecosystems and global problems consequent to anthropogenic activities.
- Discuss the laws/ acts made by government to prevent pollution, to protect biodiversity and environment as a whole.
- Acquaint with international agreements and national movements, and realize citizen's role in protecting environment and nature.

Unit 1: Environment and Natural Resources:

(06hrs)

1. Multidisciplinary nature of environmental education; scope and importance.
2. Man as an integral product and part of the Nature.
3. A brief account of land, forest and water resources in India and their importance.
4. Biodiversity: Definition; importance of Biodiversity - ecological, consumptive, productive, social, ethical and moral, aesthetic, and option value.
5. Levels of Biodiversity: genetic, species and ecosystem diversity.

Unit-2: Environmental degradation and impacts:

(10hrs)

1. Human population growth and its impacts on environment; land use change, land degradation, soil erosion and desertification.
2. Use and over-exploitation of surface and ground water, construction of dams, floods, conflicts over water (within India).
3. Deforestation: Causes and effects due to expansion of agriculture, firewood, mining, forest fires and building of new habitats.
4. Non-renewable energy resources, their utilization and influences.
5. A brief account of air, water, soil and noise pollutions; Biological, industrial and solid wastes in urban areas. Human health and economic risks.
6. Green house effect - global warming; ocean acidification, ozone layer depletion, acid rains and impacts on human communities and agriculture.
7. Threats to biodiversity: Natural calamities, habitat destruction and fragmentation, over exploitation, hunting and poaching, introduction of exotic species, pollution, predator and pest control.

Unit 3: Conservation of Environment:

(10hrs)

Concept of sustainability and sustainable development with judicious use of land, water and forest resources; a forestation.

1. Control measures for various types of pollution; use of renewable and alternate sources of energy.
2. Solid waste management: Control measures of urban and industrial waste.
3. Conservation of biodiversity: In-situ and ex-situ conservation of biodiversity.
4. Environment Laws: Environment Protection Act; Act; Wildlife Protection Act; Forest Conservation Act.
5. International agreements: Montreal and Kyoto protocols; Environmental movements: Bishnois of Rajasthan, Chipko, Silent valley.



Suggested activities to learner: (4 hours)

1. Visit to an area to document environmental assets: river/ forest/ flora/fauna, etc
2. Visit to a local polluted site-Urban/Rural/Industrial/Agricultural site.
3. Study of common plants, insects, birds and basic principles of identification.
4. Study of simple ecosystems -forest, tank, pond, lake, mangroves etc.
5. Case study of a Forest ecosystem or a pond ecosystem.

Suggested text book:

1. Erach Barucha (2004) *Text book of Environmental Studies for Undergraduate courses* (Prepared for University Grants Commission) Universities Press.
2. Purnima Smarath (2018) *Environmental studies* Kalyani Publishers, Ludhiana

Reference books:

1. Odum, E.P., Odum, H.T. & Andrews, J. (1971) *Fundamentals of Ecology*. Philadelphia: Saunders.
2. Pepper, I.L., Gerba, C.P. & Brusseau, M.L. (2011). *Environmental and Pollution Science*. Academic Press.
3. Raven, P.H., Hassenzahl, D.M. & Berg, L.R. (2012) *Environment. 8th edition*. John Wiley & Sons.
4. Singh, J.S., Singh, S.P. and Gupta, S.R. (2014) *Ecology, Environmental Science and Conservation*. S. Chand Publishing, New Delhi.
5. Sengupta, R. (2003) *Ecology and economics: An approach to sustainable development*. OUP.
6. Wilson, E. O. (2006) *The Creation: An appeal to save life on earth*. New York: Norton.
7. Groom, Martha J., Gary K. Meffe, and Carl Ronald Carroll (2006) *Principles of Conservation Biology*. Sunderland: Sinauer Associates.



MODEL QUESTION PAPERS

Life
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III

ENVIRONMENTAL EDUCATION(Mandatory)

Time:

2Hrs

Max Marks: 50

SECTION – A

Answer any **FOUR** questions. Each question carries 5 marks .
20Marks

4X5 =

1. Write short notes on Ecosystem diversity
2. Write a brief account on Water resources in India
3. Describe about Green house effect
4. Soil erosion
5. Write about any two kinds of pollutions
6. Wildlife protection Act
7. Chipko & Silent valley movement
8. A forestation

SECTION – B

Answer any **THREE** questions. Each question carries 10 marks
30Marks

3 x 10 =

9. Write an essay on Scope & Importance of environmental education.
(or)
10. Give a detailed explanation on Biodiversity and its importance .
11. Explain about Non renewable energy resources, their utilization and influences.
(or)
12. Describe threats to biodiversity.



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13. Write an detailed account and differences on In situ & Ex situ conservation.
(or)
14. Define sustainability? Explain sustainable development of Water and Forest resources.

ENVIRONMENTAL EDUCATION(Mandatory)

Time:

2Hrs

Max Marks: 50

SECTION – A

Answer any **FOUR** questions. Each question carries 5 marks .
20Marks

4X5 =

15. Write short notes on Ecosystem diversity
16. Write a brief account on Water resources in India
17. Describe about Green house effect
18. Soil erosion
19. Write about any two kinds of pollutions
20. Wildlife protection Act
21. Chipko & Silent valley movement
22. A forestation

SECTION – B

Answer any **THREE** questions. Each question carries 10 marks
30Marks

3 x 10 =

23. Write an essay on Scope & Importance of environmental education.
(or)
24. Give a detailed explanation on Biodiversity and its importance .
25. Explain about Non renewable energy resources, their utilization and influences.
(or)
26. Describe threats to biodiversity.
27. Write an detailed account and differences on In situ & Ex situ conservation.
(or)
28. Define sustainability? Explain sustainable development of Water and Forest resources.