



**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

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III

### ENVIRONMENTAL EDUCATION(Mandatory)

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Time:  
2Hrs

Max Marks: 50

#### SECTION – A

Answer any **FOUR** questions. Each question carries 5 marks . **4X5 =**  
**20Marks**

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 **3 x 10 =**  
**30Marks**

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.



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 . **4X5 = 20Marks**

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 **3 x 10 = 30Marks**

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.