

VIJAYANAGARA SRI KRISHNADEVARAYA UNIVERSITY, BALLARI

**SYLLABUS of ENVIRONMENTAL STUDIES (CBCS) for  
B.A/B.Sc/B.Com/B.C.A/B.B.A/B.S.W/ II Semester  
COMMON PAPER (COMPULSORY) EFFECTIVE FROM 2019-20  
ENVIRONMENTAL STUDIES (CBCS)**

**Marks: 70**

**56 Hrs**

**Unit 1: Introduction to Environmental studies:** Definition, scope and importance, Need for public awareness, Institutions in Environment, People in Environment. **Natural resources :** Renewable and Non-renewable resources. Natural resources and associated problems, Role of an individual in the conservation of natural resources, Concept of sustainability and sustainable development. **-10hrs**

**Unit 2: Biodiversity and its conservation:** Introduction- definition, Types of diversity: genetic, species and ecosystem biodiversity.

**Value of biodiversity:** Consumptive use, productive use, social, ethical and aesthetic values. Biodiversity at global, national and local levels. India as a mega diversity nation, Hot spots of biodiversity.

**Threats to biodiversity:** habitat loss, poaching of wildlife, man- wildlife conflicts. Endangered and endemic species of India.

**Conservation of biodiversity:** In- situ and Ex-situ conservation of biodiversity. **-07hrs**

**Unit 3: Ecosystems:** Concept of ecosystem, Structure and function of ecosystem, Producers, consumers and decomposers. Energy flow in an ecosystem: food chain, food web and ecological succession Case studies of the following ecosystems:

- a) Forest ecosystem
- b) Grassland ecosystem
- c) Desert ecosystem
- d) Aquatic ecosystems ( ponds, streams, lakes, rivers, oceans, estuaries). **-10hrs**

**Unit 4: Environmental Pollution: Air pollution:** definition, causes, effects and Control measures.

**Water pollution:** definition, causes, effects and control measures.

**Soil pollution:** Causes of soil degradation, effects and control measures.

**Noise pollution:** Causes, effects and control measures. Nuclear hazards.

**Global warming:** Depletion of ozone layer, green house effect.

**Solid waste management:** Causes, effects and control measures of urban and industrial wastes.

**Disaster management:** Floods, Earthquakes, Cyclones, Landslides. **-10hrs**

**Unit 5: Social issues and the Environment: Environmental movements:** Chipko, Appiko, Silent valley, Bishnois of Rajasthan. Rain water harvesting, watershed management, Human right, Rights of animals. Reduce, Reuse and Recycle. Environment protection Act, Wildlife protection Act, Forest conservation Act, Public awareness, using an Environmental Calendar of Activities. **-10hrs**

**Unit 6: Human Population and the Environment: Population explosion:** Family welfare programme, methods of sterilization, urbanization, environment and human health, infectious diseases, water-related diseases, risks due to chemicals in food, cancer. HIV/AIDS, Woman and child welfare.

**-05hrs**

## REFERENCES

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2. Bharucha Erach (2003), The Biodiversity of India of India, Mapin Publishing Pvt. Ltd., Ahmedabad- 380013, India, Email: mapin@ivenet.net (R)
3. Gadgil, Madhav (2001) Ecological Journeys, The Science and Politics of conservation in India. Permanent Black.
4. Cunningham, W.P.Cooper, T.H. Gorhani, E & Hepworth, M.T.(2001). Environmental Encyclopedia, Jaico Publ. House, Mumbai, 1196p
5. Dcc A.K., Environmental Chemistry, Wiley Eastern Ltd.
6. Down to Earth, Centre for Science and Environemnt (R)
7. Hawkins R.E, REncyclopedia of Indian Natural Histry, Bombay Natural History Society, Bombay(R)
8. Environmental Geography- SavindraSingh, New Delhi.
9. Environmental Geography- Saxena H.M., Rawar Publications, Jaipur
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11. World Commission on environment and development. 1987. Our Common Future, Oxford University Press.
12. Odum,E.P., Odum, h.T. & Andrews, J.!971. Fundamnetals of Ecology. Philadelphia: Saunders.