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| **23UVE301** |  **AECC :** **ENVIRONMENTAL STUDIES** | **SEMESTER – III** |
| **Course Objectives:****The course aims*** To enable the students acquire knowledge, values, attitudes, commitment and skills needed to protect and improve the environment.
* To implicate awareness among young minds for safeguarding environment from manmade disasters.
 |
| **Credits: 2 Total Hours: 30** |
| **UNIT** | **contents** | **Hrs** | **CO** |
| **I** | **Environment** – Definition – Scope – Structure and function of ecosystems - producers, consumers and decomposers - Energy flow in the ecosystem - Ecological succession– food chain, food webs and ecological pyramids – Concept of sustainable development. | **06** | **CO1** |
| **II** | **Natural resources:** Renewable - air, water, soil, land and wildlife resources. Non–renewable – Mineral coal, oil and gas. Environmental problems related to the extraction and use of natural resources. | **06** | **CO2** |
| **III** | **Biodiversity** – Definition – Values – Consumption use, productive social, ethical, aesthetic and option values threats to bio diversity – hotspots of bio diversity – conservation of bio- diversity: in – situ Ex – situ. Bio – wealth - National and Global level. | **06** | **CO3** |
| **IV** | **Environmental Pollution:** Definition – causes, effects and mitigation measures – Air pollution, Water pollution, Soil pollution, Noise pollution, Thermal pollution – Nuclear hazards – Solid wastes acid rain – Climate change and global warming environmental laws and regulations in India – Earth summit | **06** | **CO4** |
| **V** | **Population and environment** – Population explosion – Environment and human health – HIV/AIDS – Women and Child welfare – Disaster Management - Resettlement and Rehabilitation of people, Role of information technology in environmental health – Environmental awareness. | **06** | **CO5** |
| **Text Book** |
| 1. | Department of Biochemistry. Environmental Studies (Study Material). Published by K. S. Rangasamy College of Arts & Science (Autonomous). Tiruchengode. |
| **Reference Book** |
| 1. | *Erach Bharucha*. 2005. **Textbook of Environmental studies**. Universities press. PVT. Ltd.  |

# COURSE OUTCOMES (CO)

After completion of the course, the students will be able to

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| **CO1** | Describe the types of ecosystem and concepts in sustainable development |
| **CO2** | Explain the importance of natural resources  |
| **CO3** | Recite about the biodiversity, hot spots of biodiversity and itsConservation |
| **CO4** | Be conscious on the effects of pollution and global warming  |
| **CO5** | Implement the preventive measures for environmental issues |