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| Hours / Week | : | 4 | |  | Sessional Marks | : | 40 |
| Credits | : | 4 | |  | End Examination Marks | : | 60 |

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| **UNIT - I** |
| **Introduction**: Definition, Scope and Importance of Environmental studies, Environmental components.  ECOSYSTEM: Introduction, types, characteristics, features, structure and functions of Ecosystems. |
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| **UNIT – II** |
| **Environment And Natural Resources Management**: Land Resources and its importance, Land degradation, soil erosion and desertification. Effects of modern agriculture, fertilizer and pesticide problems.  **Forest Resources**: Use and over-exploitation – Mining and dams-their effects on forest and tribal people.  WATER RESOURCES: Use and over-utilization of surface and ground water, Floods and droughts. Water logging and salinity, Conflicts over water sharing, Rain water harvesting, clouds seeding and watershed management. |
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| **UNIT – III** |
| **Environmental Pollution**: Local and global issues, Causes, Effects and control measures of Air pollution, Water Pollution, soil Pollution, Marine Pollution, Noise pollution. **Solid Waste Management:** Composing, vermiculture – Urban and industrial wastes. |
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| **UNIT – IV** |
| **Environmental Problems In India**: Drinking water, sanitation and public health. Effects of urbanization, transportation, Industrialization on the quality of environment, Green revolution. |
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| **UNIT – V** |
| **Environmental Acts**: Water (Prevention and control of pollution) Act- Air(Prevention and control of pollution) Act- Environment protection Act, Wildlife protection Act, Forest conservation Act, Coastal Zone Regulations  **Case Studies**: Silent Valley Project, Madhura Refinery and Taj Mahal , Tehri Dam, Kolleru lake- aquaculture, Fluorosis in Andhra Pradesh. |
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| REFERENCE BOOKS |
| 1. Principles of Environmental Studies, Manoharanachari C, Jayaramaredy P 2. Environmental Science, Chandra Sekhar M 3. Perspectives in Environmental studies, Kaushik A, Kaushik C P 4. Introduction of Environmental Science, Anjaneyulu Y 5. Environmental Biology, Agarwal K C 6. Environmental Encyclopedia, Cunning ham W P, Cooper T H, Gorhani E, and Hepworth M T 7. Down to Earth , Science and Environmental Monthly Magazine Centre for Science & Environmental 8. Hand book of Environmental laws, rules.Guidelines Compliances and Standards Vol I & II, Trivedy R K |