| Module     | Unit | Topics                                                                                                                                                                                                                   | Hrs. |
|------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| No.<br>1.0 | No.  |                                                                                                                                                                                                                          | 10   |
|            | 1.1  | Introduction and Definition of Environment: Significance of Environment Management for contemporary managers, Career opportunities, Environmental issues relevant to India, Sustainable Development, the Energy scenario |      |
| 2.0        |      |                                                                                                                                                                                                                          | 06   |
|            | 2.1  | Global Environmental concerns: Global Warming, Acid Rain, Ozone Depletion, Hazardous Wastes, Endangered life-species, Loss of Biodiversity, Industrial/Man-made disasters, Atomic/Biomedical hazards, etc.               |      |
| 3.0        |      |                                                                                                                                                                                                                          | 05   |
|            | 3.1  | Concepts of Ecology: Ecosystems and interdependence between living organisms, habitats, limiting factors, carrying capacity, food chain, etc.                                                                            |      |
| 4.0        |      |                                                                                                                                                                                                                          | 10   |
|            | 4.1  | Scope of Environment Management, Role and functions of Government as a planning and regulating agency Environment Quality Management and Corporate Environmental Responsibility                                          |      |
| 5.0        |      |                                                                                                                                                                                                                          | 05   |
|            | 5.1  | Total Quality Environmental Management, ISO-14000, EMS certification                                                                                                                                                     |      |
| 6.0        |      |                                                                                                                                                                                                                          | 03   |
|            | 6.1  | General overview of major legislations like Environment Protection Act, Air (P & CP) Act, Water (P & CP) Act, Wildlife Protection Act, Forest Act, Factories Act, etc.                                                   |      |
|            |      | Total                                                                                                                                                                                                                    | 39   |

## **References:**

- 1. Environmental Management: Principles and Practice, C J Barrow, Routledge Publishers London, 1999
- 2. A Handbook of Environmental Management Edited by Jon C. Lovett and David G. Ockwell, Edward Elgar Publishing
- 3. Environmental Management V Ramachandra and Vijay Kulkarni, TERI Press
- 4. Indian Standard Environmental Management Systems Requirements With Guidance For Use, Bureau Of Indian Standards, February 2005
- 5. Environmental Management: An Indian Perspective, S N Chary and Vinod Vyasulu, Maclillan India, 2000
- 6. Introduction to Environmental Management, Mary K Theodore and Louise Theodore, CRC University of Mumbai, B. E. (Electronics & Telecommunication Engineering), Rev 2016 199