# SEMESTER 1<sup>st</sup> to 3<sup>rd</sup> MULTIDISCIPLINARY COURSE

#### EVS022I: ENVIRONMENTAL SIENNCES - ENVIRONMENTAL ISSUES AND SUSTAINABILITY

(3 CREDITS)

**Paper outcome:** This course is designed to offer a comprehensive understanding of basic environmental issues, drivers of environmental change and management perspective. Furthermore, this paper will help the students to understand key governance and policy interventions needed to improve the wellbeing of the environment. This course will also highlight the role of citizens and eco-movements to achieve the objectives of sustainability.

### **UNIT I: GLOBAL ENVIRONMENTAL ISSUES**

Global warming and climate change, Human population explosion, Desertification, Ozone layer depletion, Acid precipitation, Global biodiversity loss

#### UNIT II: ENVIRONMENTAL GOVERNANCE AND POLICY

Concept of environmental governance and environmental literacy, Environmental governance at global level (institutional arrangements), Role of NGO's and corporate in environmental decision making, Constitutional provisions for environmental protection (article 21, 48A, 51A (g)), National Environment Policy-2006

## UNIT III: ENVIRONMENTALISM, CITIZEN SCIENCE AND SUSTAINABILITY

History and development of environmentalism (Biocentrism, Anthropocentrism, Eco centrism), Environmental movements (Greenbelt movement, Chipko, Narmada bachao andolan), Role of citizen science to foster environmental protection, Concept of Environmental justice and stewardship, Ecological footprint and sustainability, Sustainable development goals (overview)

## **BIBLIOGRAPHY**

- 1. Global Warming and Climate Change: Dr. S K Agarwal.
- 2. Text Book of Environmental Studies for UG Course: E. Bharucha
- 3. Biodiversity: K.C. Agarwal
- 4. Atmospheric pollution and climate change: Dr. P C Sinha.
- 5. Population Ecology: P.S. Aaradhana
- 6. Environmental Science: Jackson & Jackson
- 7. Global & General Environment: H.D. Kumar, Swati Kumar
- 8. Environmental Science: Enger and Smith
- 9. Basics of Environmental Science: Michael Allaby
- 10. Environmental Education (Scientific, Social and Legal Aspects): H. M. Dami
- 11. Environmental Problems, Policies and Strategies: Jai Prakash; S. K. Srivastava.