

## **Syllabus of Environmental Studies for UG programmes**

### **Environmental Studies Course**

**Learning objectives:** This course attempts to create pro-environment attitude and a behavioural pattern in student community and society that attaches importance and priority to create sustainable life style and awareness on various environmental issues.

**Learning outcomes:** This course is expected to inculcate a critical thinking on various dimensions of environment through knowledge, skill, critical thinking and problem-solving.

#### **Paper EVS2201 Environmental Education**

**(Credits - 02)**

##### **Unit 1: Understanding the Environment**

- 1.1. Environment: concept, importance and components
- 1.2. Ecosystem: Concept, structure and function (food chain, food web, ecological pyramids and energy flow)
- 1.3. Ecosystem services: (Provisioning, regulating and cultural)
- 1.4. Biodiversity: levels, values and threats and conservation
- 1.5. Concept and objectives of environmental education, environmental ethics

##### **Unit 2: Natural resources and Environmental pollution**

- 2.1. Natural resources: Renewable and non-renewable (Global status, distribution and production)
- 2.2. Management of natural resources: Individual, community and government managed
- 2.3. Air, water and soil pollution: Causes, consequences and control
- 2.4. Solid waste management: Collection, segregation, transportation and disposal; 3R's
- 2.5. Climate change: Causes and consequences

##### **Suggested Reading:**

- Asthana, D. K. Text Book of Environmental Studies. S. Chand Publishing.
- Basu, M., Xavier, S. Fundamentals of Environmental Studies, Cambridge University Press, India.
- Basu, R. N., (Ed.) Environment. University of Calcutta, Kolkata.
- Bharucha, E. Textbook of Environmental Studies for Undergraduate Courses. Universities Press.
- Miller T.O. Jr., Environmental Science, Wadsworth Publishing Co.
- Wagner K.D. Environmental Management. W.B. Saunders Co. Philadelphia, USA 499p.
- Mckinnecv, M.L. & Schoch. R.M. Environmental Science systems & Solutions. Web enhanced edition. 639p.