# DEPARTMENT OF BIOSCIENCES M.Sc. ENVIRONMENTAL SCIENCE

#### ESS 505 HUMAN POPULATION AND ENVIRONMENT

39 hrs.

#### **Course Outcomes:**

CO1 Discuss the association between population growth and dissemination of environmental pollutants.

CO2 Understand the role of medicinal plants in the control of human diseases.

CO3 Discuss the role of human society in the conservation of natural resources.

CO4 Understand traditional ecological knowledge.

CO5 Understand the role of women in environmental conservation.

#### UNIT I (13 hours)

Population status in India and the world, population growth and explosion, family welfare programme. Measurement of population - Natality and Mortality, Population density, pattern of population distribution; population dispersal - Emigration, Immigration and Migration; Environmental problems of population growth.

# UNIT II (13 hours)

Environment and human health, human rights, value education, women and child welfare, role of environmental education in the management of environment, Environmental Education Programmes, Formal Environmental Education (Primary, secondary and tertiary school level), Non-formal Environmental Education (meetings, public lectures, exhibition etc.).

## UNIT III (13 hours)

Role of natural resources in the human development, role of human society in the conservation of forest, river, ponds and other natural resources, role of women in environmental conservation; medicinal plants and their role to control human population from disease. Traditional ecological knowledge.

### **References:**

- 1. Agrawal, K.C., 2001. Fundamentals of Environmental Biology, Nidhi Publishers, Bikaner, India.
- 2. Lori M. Hunter, 2000. The Environmental Implications of Population Dynamics, Rand Corporation.
- 3. Don Melnick, 2005. Environment and Human Well-being A Practical Strategy, Earthscan.
- 4. Sharma, P.D. 1975. Elements of Ecology, Rastogi Publications, Meerut.
- 5. Sharma, P.D., 2012. Ecology and Environment, Rastogi Publications, Meerut