IV SEMESTER

PAPER-401 GLOBAL PROSPECTS TOWARDS ENVIRONMENTAL ETHICS AND SUSTAINABLE DEVELOPMENT

UNIT I
1. Totality of environment-Holistic view and ecology to environmental Science
2. Environmental Science on the move.
3. Ecosystem Management and Environmental ethics
4. From Stockholm to Rio and Beyond

UNIT II
1. Global issues and strategies.
2. World Trade and environment.
3. The vital issues process: Managing critical infrastructures in the global areas.
4. Issues calling for immediate attention.

UNIT III
1. Terrorism and its impact on human ecosystem.
2. Effects of Nuclear Explosions and Threat of Nuclear Terrorism.
3. Genesis of Biological warfare and current threat.
4. Chemical warfare.
5. The chemical weapons convention.

UNIT IV
1. The global environment debate.
2. Managing global commons.
3. Poverty, Trade, DEBT, and Environment.

UNIT V
1. Sustainable Development: brief history and interpretation.
2. Sustainable development in India.
3. Rural development, industrialization and self employment.
4. Strategies and appropriate Technologies for Sustainable Development.
5. Environmental Accounting.
UNIT I
1. Introduction.
2. Collection, Tabulation and classification of data.
3. Measure of Central values, mean, mode and median.
4. Geometric mean and Harmonic mean.

UNIT II
1. Calculation of coefficient of correlation in simple series.
2. Linear regression.
3. Curve fitting up to second order.
5. Binomial, poisson and normal distribution.

UNIT III
1. Large samples: relating to attributes, relating to variable differences of means.
2. Small samples: ‘t’test.
3. ANOVA – 1 way classification.
4. ANOVA – 2 way classification.
5. Chi Square test.

UNIT IV
1. Concept and method of Research
2. Sources of information on research and relation of research topic.
4. Use of Sampling and Questionnaires construction for Research.
5. Processing of Research data and preparation of research report.

UNIT V
1. Approaches to development of models.
2. Linear, simple and multiple regression models.
3. Lotka-volterra Model and Leslie’s matrix model.
4. Point source stream pollution model.
5. Box model and Gaussian plume model.

(Note: Mathematical aspects of statistics and derivations are not included in this syllabus.)