

**M.Sc (Final) Environmental Sciences  
Semester IV**

**Paper IV C  
SYSTEM ANALYSIS AND MODELLING**

**Unit I**

The nature of mathematical models, goals of model building, anatomy of mathematical models; Basic mathematical tools in model building

**Unit II**

Analysis of model properties; Approaches to the development of model

**Unit III**

Statistical methods for environmental sciences; Modeling of river and estuary water quality

**Unit IV**

System modeling for water pollution control; Urban air pollution modeling

**Unit V**

Remote sensing: Urban planning, Waste land mapping, mining of mineral resources