COURSE-III: PLANT ECOLOGY AND BIOSTATISTICS (BSCBO-203)

UNIT SCHEDULE

BLOCK-1-GENERAL ECOLOGY AND ECOSYSTEM

Unit-1-Definition, Branches and Scope of Ecology
Unit-2- Ecosystem Ecology-I: Types, Structure, Abiotic and Biotic components, Food chain, Food web, Ecological pyramids, Population ecology
Unit-3- Ecosystem Ecology-II: Energy flow, Productivity, Biogeochemical cycles –water, sulphur, carbon, and nitrogen cycles, Ecological succession and Community ecology
Unit-4- Ecological Factors: Climatic, Edaphic, Physiographic, Biotic
Unit-5- Pollution Ecology: Air, Noise, Water and Soil
Unit-6 -Biogeographical regions of India, Vegetation types of Uttarakhand: Forests and grasslands

BLOCK-2- APPLIED ECOLOGY & REMOTE SENSING

Unit-7- Remote sensing- Tools and Techniques: Application, Physical basis of remote sensing
Unit-8 -Aerial and Space platforms, Aerial photography and Photo-interpretation

BLOCK-3- BIOSTATISTICS

Unit-9-Methods Graphic and Non-graphic presentation of data
Unit-10-Measurements of Central tendencies: Mean, Median, Mode
Unit-11-Measures of Dispersions and Deviations: Measures of dispersion- range, Mean deviation and Standard deviation
Unit-12-Correlation, Statutory test: Coefficient of correlation, chi-square test, t test