COURSE-LABORATORY PRACTICAL-IV (MSCBOT-609L)

Syllabus

- **Biostatistics:** Preparation of questionnaire and data collection, Data tabulation, interpretation and reporting, Measurement of mean, mode, medium, standard deviation and standard error, Correlation and regression analysis, Study of Chi-square test, Study of ANOVA
- **Forest Ecology:** On the basis of given data set and explain climate of these sites/locations, Study of two different forest (e.g., chir-pine and oak) soil characteristics, viz., soil colour, texture, moisture content, bulk density, ph, carbon and nitrogen, Productivity estimation of two forest tree species by harvest method, Preparation of herbarium of forest vegetation (herb, shrub, tree and climber) of your locality with a note mentioning local and botanical name, habitat, phenology and local use, plantations of timber and industrial species (e.g., Poplar, Eucalypt, etc), Study forest vegetation quantitatively for characteristics, viz, IVI and species diversity indices using standard size and number of quadrates in two different forests (e.g., Sal and mixed forest) or plantations (such as, mixed tree species and chir-pine, etc.),
- **Ethnobotany:** Preparation of the herbarium of medicinally-important plants, Make a list of plants used by villagers and on the basis of their local use, place them in diverse ethnobotanical group, Economic potential of phytomedicine and role of phytomedicine in modern medical system,

Unit Schedule

Biostatistics

Unit-1-Preparation of questionnaire and data collection
Unit-2-Data tabulation, interpretation and reporting
Unit-3-Measurement of mean, mode, medium, standard deviation and standard error
Unit-4-Correlation and regression analysis
Unit-5-Study of Chi-square test
Unit-6-Study of ANOVA

Elective papers

Forest Ecology

Unit-1- On the basis of given data set and explain climate of these sites/locations
Unit-2-Study of two different forest (e.g., chir-pine and oak) soil characteristics, viz., soil colour, texture, moisture content, bulk density, ph, carbon and nitrogen
Unit-3-Productivity estimation of two forest tree species by Harvest method

Unit-4-Preparation of herbarium of forest vegetation (herb, shrub, tree and climber) of your locality with a note mentioning local and botanical name, habitat, phenology and local use
Unit-5-Prepare a field diary, Mention your day-to-day observations on forestry species and plantations of timber and industrial species (e.g., Poplar, Eucalypt, etc)
Unit-6-Study forest vegetation quantitatively for characteristics, viz, IVI and species diversity indices using standard size and number of quadrates in two different forests (e.g., Sal and mixed forest) or plantations (such as, mixed tree species and chir-pine, etc.)

Ethnobotany

Unit-1-Preparation of the herbarium of medicinally-important plants
Unit-2-Make a list of plants used by villagers and on the basis of their local use, place them in diverse ethnobotanical group
Unit-3-Economic potential of phytomedicine and role of phytomedicine in modern medical system