

**Course: M.Sc. in Forestry and Environmental Sciences**

**Syllabus Objectives and Outcome**

**SEMESTER-I**

**PAPER I. SILVICULTURE**

**Objective:** To provide knowledge about Forest ecosystem concept, stand dynamics forest succession, productivity and vegetation forms and regeneration of forest.

**Outcome:** The course enables the students to know the components and dynamics of forest or different forest types.

**PAPER II. FOREST BIOMETRY, SURVEYING & ENGINEERING**

**Objective:** To develop understanding of students about tree measurements, forest inventory, forest survey and yield concepts.

**Outcome:** To enable the students to record the biometric measurement of tree and survey of the entire forest area.

**PAPER III: FOREST MANAGEMENT, REMOTE SENSING & GIS**

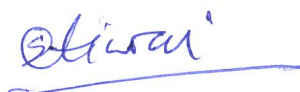
**Objective:** To provide knowledge to students about forest management and use of Remote Sensing and GIS technique.

**Outcome:** The course enable the students to be well-versed in forest management with latest techniques of Remote Sensing & GIS technique.

**Paper IV. FOREST ECOLOGY AND BIODIVERSITY CONSERVATION**

**Objective:** To develop understanding of students about ecological aspects of forest resource and biodiversity conservation.

**Outcome:** The course enables the students to understand the entire ecosystem of the forest with the special emphasis on the occurring biodiversity.



## **PAPER V. FOREST PROTECTION**

**Objective:** To provide knowledge to students about forest protection through diseases & pest management.

**Outcome:** Enables the students to maintain or to develop the healthy growth of the tree with the protection from pest and other damaging agents of forest.

## **PAPER VI. FOREST STATISTICS & RESEARCH METHODOLOGY**

**Objective:** To provide exposure about methods of statistical analysis, design and sampling techniques.

**Outcome:** Make the students well versed in the statistical approach to assess the forest area.

## **SEMESTER-II**

### **PAPER I. FOREST POLICY, LAWS AND ENVIRONMENTAL LEGISLATION**

**Objective:** To develop understanding of students about forest policy, laws and Environmental Legislation.

**Outcome:** Enables the students to be able to manage the forest with the legal aspects.

### **PAPER II. FOREST TREE IMPROVEMENT AND BIOTECHNOLOGY**

**Objective:** To acquaint the students about general principles of tree breeding with examples of important trees.

**Outcome:** Enables the students to develop the improved progeny of the forest trees.

### **PAPER III. WOOD TECHNOLOGY AND NANO FORESTRY**

**Objective:** To acquaint with the physical characteristics and strength properties of wood.

**Outcome:** the course enables the students to deal the forest as a timber industry and wood as a major product of forest.



