## शहीद नंदकुमार पटेल विश्वविद्यालय, गढ़ उमरिया, ओड़िशा रोड, रायगढ़ SYLLABUS

#### **B.SC. PART-III**

#### FORESTRY PAPER - I

MM: 50

#### UNIT - I

#### **Forest Ecology**

Basic ecological principles and concepts.

Abiotic and Biotic Components of forest ecosystem.

Fundamental Concepts Related to energy in Ecological system. Food chain, food web and Tropic structure.

**Ecological Pyramids.** 

Biotic Community Concept.

#### **UNIT-II**

#### Wildlife Management

Wildlife Conservation and Management

National Parks and Sanctuaries.

**Project Tiger** 

Vanishing Species.

#### **UNIT-III**

#### **Wildlife Protection Act**

General idea of wildlife protection act, 1972.

#### **UNIT-IV**

#### **Forest Policies**

Brief idea of Forest policies of 1984, 1952, 1988.

Need for new policy.

#### **UNIT-V**

#### **Forest Law**

Brief Knowledge of Indian Forest act, 1927

Forest Conservation act, 1980

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**B.SC. PART-III** 

#### FORESTRY PAPER – II

MM: 50

#### UNIT - I

#### **Forest Soils**

Definition and Function of Soil, Importance of Soil Soil Formation, Soil Properties and Soil pollution

#### **UNIT-II**

#### **Forest Pathology**

Definition, kinds of symptoms of diseases, methods of control, Root Diseases and their control, Heart Root, Nursery diseases, Common Diseases in Selected Forest Tiger.

#### **UNIT-III**

#### **Forest Entomolgy**

Classification of class insecta with distinguishing characters, Pests of Important Forest Trees and their control, Pests of Nurseries.

#### **UNIT-IV**

#### **Forest Protection**

Introduction, Factors affecting forest protection and kinds of forest protection measures, Protection of forest crop Injuries by-Man, Animals, Plants, Adverse climatic factors.

#### **UNIT - V**

#### **Forest Engineering**

Building Materials, Building Construction, Forest Roads, Forest Bridges

#### **List of Reference books:**

Forest Entomology - B.K. Bakshi.
 Ecology and Environ Soi -Rastogi Publication

3. Wildlife Management -S.S.Negi/L.S. Khanna

4. Indian forest act - Manual
5. Forest Laws and Policies - Manual
6. Soil Seine - Deji
7. Forest Patrol by - Restom
8. Forest Enquiring - L.S. Khanna
9. Reads Bridges - L.S. Khanna
10. Introduction of Ecology - E.P. Odum

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## B.SC. PART-III

# FORESTRY PRACTICAL

MM: 50

#### **List of Practicals**

- 1. Ecology Quadrates for density abundance and frequency.
- 2. Study of components of forest ecosystem.
- 3. Visit to National Park or Wildlife Sentry.
- 4. Study of Soils.
- 5. Soil pH