

## **CBO-4002: MYCORRHIZAE, MUSHROOMS, ETHNOBOTANY AND PLANT GEOGRAPHY**

### **Unit-I Mycorrhizae**

1. Introduction to Ectomycorrhizae, AM Fungi and orchid mycorrhizae
2. Glomeromycota - Recent trends in mycorrhizal taxonomy
3. Isolation and multiplication of mycorrhizae, role in crop productivity and forestry.
4. Phosphate solubilizing fungi (PSF)

### **Unit-II Mushrooms**

1. Types of Mushrooms:  
Oyster, white button, paddy straw, Morels, Truffles and poisonous mushrooms.
2. Method of cultivation of *Agaricus bisporus*, scope and commercial cultivation and biological significance.
3. Medicinal and nutritional value of Edible and Poisonous mushrooms.
4. Effect of environmental, nutrient and chemical factors on mushroom formation

### **Unit-III Ethnobotany**

1. Ethnobotany and its sub disciplines, Major tribes in India, Comparison of Ethnobotany and Economic botany
2. Medico-ethnobotanical surveys and their role in Ayurveda. Following medico-ethno-botanically important plants are to be studied: *Adhatoda*, *Rauwolfia*, *Azadirachta*, *Madhuca*, Turmeric, Pipal, Tulsi, Amla, Baheda, Harde, Arjun sadad, *Diospyros*
3. Ethnobotany and its role in domestication and conservation of native plant genetic resources.
4. Ethnobotany in context of National priorities and Health care programme.

### **Unit-IV Plant geography**

1. Importance of phytogeography
2. Continental drift
3. Climate and vegetation, discontinuity and endemism
4. Vegetation types of India, Forest types of Gujarat
5. Land flora of Gujarat