

## **EBO-3001: Biofertilizer Technology**

**(Credits: 2)**

### **Unit-I**

1. Biofertilizers: Definition and types, importance of biofertilizers in agriculture
2. Characteristics of biofertilizers: *Rhizobium*, *Azotobacter*, *Azospirillum*, Phosphate solubilizing microorganisms, cyanobacteria, *Azolla*, Mycorrhizae
3. Symbiosis: Physiology, biochemistry and molecular genetics of symbiosis
4. Enzymes and their regulation: Nitrogenase, hydrogenase

### **Unit-II**

1. Production technology: Strain selection, sterilization, growth and fermentation, mass production of various biofertilizers
2. Application technology: Standards and quality control, application for field and tree crops, nursery plants and seedlings
3. Extension, promotion and marketing: Extension strategies, diagnosis for the effectiveness of inoculation, improvement in distribution system