EBO-501 Biofertilizer Technology

Unit-I

- 1. Biofertilizers: Definition and types, importance of biofertlizers in agriculture
- 2. Characteristics of biofertilizers: *Rhizobium*, *Azotobactor*, *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