

**TKM COLLEGE OF ARTS & SCIENCE, KOLLAM**

**DEPARTMENT OF BOTANY**

**TECHNIQUES IN BIO-FARMING**

**SYLLABUS**

(30Hrs)

1. Organic Farming? Why Organic Farming? Detrimental effects of currently chemical dependent farming. i) Reduction of crop production due to depletion of soil Health. ii) Pesticide contamination and human health hazard. iii) Contamination of food products by pesticides & chemicals. iv) Environmental (soil, water, air) pollution. v) Reduction of natural enemies of crop pests. vi) Threat to Bio diversity **(4Hrs)**
2. Types of Farming (Advantage & disadvantage of each system): · Pure Organic Farming – Definition, Concept & Benefits, Integrated Farming system (Combination of Organic and Inorganic) , Mixed Farming **(6Hrs)**
3. Types of Farming (Advantage & disadvantage of each system): · Pure Organic Farming – Definition, Concept & Benefits · Integrated Farming system (Combination of Organic and Inorganic) · Mixed Farming **(4 hrs)**
4. Organic Farming (Process) · Concept of farming system · Developing organic farms · Important steps & methods **(8 hrs)**
5. Plant Nutrients: · Name of plant Nutrients · Functions of Nutrients in plant growth and Development **(4 hrs)**
6. Preparation of Compost: · Different Methods · Enrichment of compost · Nutrient composition Preparation of vermin compost: · Pit construction · Raw materials · Availability of specific species of earth worm · Method of preparation · Quality improvement of finished vermin compost **(4 hrs)**