

## 2.10 31610 FARM MACHINERY FOR HORTICULTURAL CROPS

### UNIT-1 THEORY

#### 1.1 Farm Power

1.2 Power sources for horticulture, IC engines- working principles, two stroke and four stroke engines, different systems of an IC engine.

1.3 Orchard tractors- types, Selection of tractors and cost of tractor power Tractor and implement selection for different horticultural operations.

#### 1.4 Plant protection, harvesting and orchard management machinery

1.5 Plant protection equipment for orchards

1.6 Harvesting tools and equipment

1.7 Harvesting machinery for vegetable and fruit crops, tuber crops, and tree and plantation crops.

1.8 Lawn management machinery – lawn mowers and machinery.

### UNIT-2 PRACTICAL

2.1 Study of different components of IC engine, four stroke petrol engine, two stroke petrol engine.

2.2 Identification of components of MB plough, disc plough, seed planters, their working mechanisms.

2.3 Operation of tractor and implements- operation and maintenance power tiller

2.4 Study of different inter-cultivation equipment's- pruners- Sprayers and dusters- their operation, repairs and adjustment

2.5 Harvesting tools and harvesters for horticultural crops

2.6 Field capacity and cost analysis.

### References Book:

1. Srivastava, A.C., 1990. Elements of farm machinery. Oxford IBH pub Co., New Delhi.

