2.10 30404 CROP PHYSIOLOGY

UNIT-1 THEORY:

1.1 Introduction: Definition of Plant physiology, structure and functions of cell and cell Organelles. Photosynthesis:

1.2 Significance-site of photo synthesis- light and dark reaction of Photorespiration-factors affecting photosynthesis- respiration-mechanism of glycolysis-Krebs cycle- anaerobic respiration-respiratory quoetient-compansation point.

1.3 water relations: Importance of water, active and passive absorption, ascent of sap Transpiration: Definition, significance, antitranspirants,.

1.4 factors affecting to transpiration.

1.5 Plant growth and development. Plant hormones- auxins-gibberellins-cytokinins-ethylene and abscisic acid.

1.6 Photoperiodism and verbalization.

UNIT-2 PRACTICALS:

2.1 Measurement of stomatal frequency and index.

2.2 Study of leaf anatomy of C_3 and C_4 plants.

2.3 Commercial applications of plant growth regulators.

2.4 To demonstrate that light and CO_2 is necessary for photosynthesis.

2.5 To demonstrate that O_2 is produced during photosynthesis.

2.6 To demonstrate the phenomenon of diffusion by potassium permanganate

2.7 Crystal

2.8 Measurement the rate of transpiration by Ganong's Potometer method.