**M.Phil. Botany (Reference Incomplete)**

**Paper-II Biochemistry and Plant Physiology**

Unit- I Photosynthesis: Function and model. C3 and C4 plants. Structure, function and biochemistry.

Unit-II Genetic control of flower development. Arabidopsis model system, Apetula model system.

Unit- III Importance of plant membranes in photosynthesis, respiration and transport. Cyanide resistant respiration, electron transport structure and function of mitochondria, NADP electron transport.

Unit-IV Plant reponses to stress.

Unit-V Seed germination.

Unit-VI Ascent of sap. Absorption and translocation of water and mineral salts.

**Paper-III Plant Growth and Development**

Unit-I PGR’s in crop improvement.

Unit-II Tissue culture techniques (refer M.Sc. syllabus).

Unit-III Tissue culture of genetic engineering and crop improvement.

Unit-IV Genetic engineering for crop improvement. Genetically modified foods.

Unit –V Structure of caryopsis of cereal grains, grain-filling in cereals.

Unit-VI Histochemistry.