

**EBO-1007**  
**PLANT PHYSIOLOGY**

**Unit-I**

- Growth and Development: Patterns of Growth Development, Growth Kinetics and Indices.
- Photo morphogenesis and Development: Phytochrome forms and their Function.
- Photoperiodism and Flowering Physiology: Long day and Short day Plants, Induction cycle, Florigen concept.
- Plant Growth Regulators/ Plant Hormones: Types of Hormones, Natural and Synthetic Hormones and their influence on Plant Growth and Development.
- Agricultural/Commercial applications of PGRs.

**Unit-II**

- Water Relation Plants:  
    Concept of Water Potential and its Measurement, Translocation of water-Bulk flow, Diffusion, Osmosis.
- Energy Input in plants:  
    Light Reaction of Photosynthesis, Distribution of Energy between PS-I and PS-II, Energy generation, Photo-phosphorylation.
- CO<sub>2</sub> Fixation: C<sub>3</sub>, C<sub>4</sub> and CAM Pathways.
- Respiration and Photorespiration: Recent Mechanism and Factors affecting it.
- Regulation of TCA Cycle, ETC and Energy Formation.