

JSS Mahavidyapeetha
JSS College of Arts, Commerce and Science
(Autonomous), Ooty Road, Mysore – 570025

PG Department of Botany
III- Semester – Open Elective

Plant Propagation Techniques

Unit 1: Introduction – History, scope and importance of plant propagation, Propagation structures with reference to green-house equipment and media, Seed propagation – The development of seeds, techniques of seed production and handling principles and media.

Unit- 2: Vegetative propagation: Techniques of propagation by cuttings: Stem cuttings – hard wood, semi hard wood, soft wood and herbaceous, leaf cuttings, leaf bud cuttings, root cuttings; Biology and techniques of grafting: Whip and tongue, wedge and cleft, bark, side grafting, approach.

Unit 3: Techniques of budding: T – budding patch budding, chip budding, ring budding; Layering and its natural modifications: simple layering, tip layering, mound or stool layering, air layering, compound or serpentine layering and trench layering; Propagation by specialized stems and roots.

Unit 4: Micropropagation – techniques and applications in forestry and horticulture; Advantage, limitations and applications of vegetative propagation, clones, genetic variation in asexually propagated plants, different methods. Propagation methods of some selected plants – Citrus, Grape, Mango, Mulberry, Hibiscus, Rose, Croton, Eucalyptus.