MANGALORE UNIVERSITY

DEPARTMENT OF BIOSCIENCES

MSc BIOTECHNOLOGY

BTP 507 PLANT BIOTECHNOLOGY

Course outcome

The student will

- learn the set-up of a plant tissue culture lab
- develop hand-on practical skills in plant tissue culture methods
- learn the use of media, hormones etc,
- study early development of plants, protoplast culture etc.

Estimation of plant hormones (e.g. auxins, gibberellins)
Plant tissue culture methods
Callus culture (compact and friable)
Ovule and anther culture
Cell suspension cultures
Embryogenesis
Synthetic seeds
Protoplast preparation
Protoplast fusion techniques
Plant cell immobilization
Methods of inducing resistance through tissue culture