



MANGALORE UNIVERSITY
DEPARTMENT OF BIOSCIENCES
MSc BIOTECHNOLOGY

PRACTICALS (HARD CORE COURSES)
BTP 555 ANIMAL BIOTECHNOLOGY

Course outcome

The student will

- Learn the set-up of a typical cell culture laboratory
- Acquire sterilization techniques
- Learn the use different media
- Acquire techniques used in animal cell culture.

Cleaning and sterilization methods for tissue culture

Preparation of media, buffers

Maintenance of cultures (normal and tumor cell lines)

Separation of peripheral blood mononuclear cells

Cell counting (hemocytometer)

Lymphocyte culture technique

In vitro macrophage culture from mouse

Preparation of human metaphase chromosomes

Cell viability tests

Cell proliferation assay

Growth kinetics of cells in culture

In vitro fertilization and embryo transfer techniques

Cryopreservation techniques

Cytotoxicity tests