



**MANGALORE UNIVERSITY**

**DEPARTMENT OF BIOSCIENCES**

**MSc Food Science & Nutrition**

**FNP 410 FOOD MICROBIOLOGY**

**Course outcome:**

- Identify basic microbiological laboratory practice, culturing and handling of microbes.
  - Isolate microorganisms from water and food sources.
  - Identify by various staining techniques.
  - Estimate total count in various food samples.
- 1) Preparation of bacterial smears, simple staining, differential staining, spore staining, staining of molds and yeast
  - 2) Study of the microbiological quality of milk by MBR test.
  - 3) Direct microscopic examination of foods.
  - 4) Estimation of total microbial count of yeast and molds.
  - 5) Estimation of total microbial bacterial plate count of food sample
  - 6) Enumeration of Coliforms and indicator organisms (Most Probable Number)
  - 7) Detection of Coliforms and indicator organisms by confirmed and completed tests, and using membrane filter techniques.
- Estimation of total microbial count of (a) milk products (b) fruits and vegetable products (c) meat, fish and poultry products (d) canned foods