MANGALORE UNIVERSITY

DEPARTMENT OF BIOSCIENCES

MSc Food Science & Nutrition

FNS 505 POST HARVEST TECHNOLOGY

39 Hrs (13× 3 units)

Course outcome:

- Describe post harvesting technology and the methods of harvesting
- Write down the post harvest handling and also various kinds of packaging.
- Identify the storage of food products and its challenges.
- Understand the control and to overcome the wastage due to bad storage.
- Identify the types of food storage.

UNIT I: Introduction to Post harvest technology: Definition, importance and scope of post harvest technology. Types of maturity of crop produces: Physiological maturity, horticultural maturity, harvest maturity, commercial maturity. Maturity indices and methods of determining maturity.

UNIT II: Methods of harvesting and post harvest handling: Methods of harvesting. Good agricultural practices (GAP). Methods of post harvest handling: pre-cooling, washing, cleaning and trimming, sorting, grading and sizing, disinfection, post harvest treatment, curing, waxing, packaging and storage. Packaging materials.

UNIT III: Storage of food products, challenges during storage and their control: Types of food storage, cold storage, controlled atmospheric storage. Storage pests: insect pests, spoilage microbes and other pests

REFERENCES:

- Desrosier NW & Desrosier JN. 1977.
- Frank AP. 1987. The Technology of Food Preservation. AVI Publ.
- Frazier WC. 1988. Modern Processing, Packaging and Distribution System for Foods. AVI Van nonstand Reinhold Co.
- McWilliams M. 1993. Food Microbiology. Tata McGraw Hill.
- Potty VH & Mulky MJ. 1993. Foods - Experimental Perspectives. Macmillan.
- Srilakshmi B. 2001. Food Processing. Oxford & IBH.
- Swaminathan MS. 1993. Food Science. New Age International.
- Ganesh Food Science and Experimental Foods