

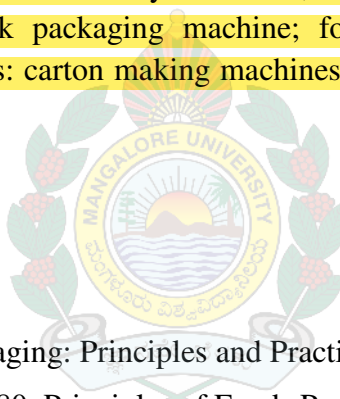
**Course outcome:**

- Describe the objectives of food packaging and packaging material.
- Classify the different types of packaging material depending on food type.
- Write down the different packaging equipment and machinery.
- Identify the importance of modified atmospheric packaging.

**Unit I:** Food packaging: Definitions, objectives and functions of packaging and packaging materials. Packaging requirements and selection of packaging materials; Types of packaging materials. Sanitation and hygiene, GMP, GLP.

**Unit II:** Food packaging systems: Different forms of packaging such as rigid, semi-rigid, flexible forms and different packaging system for (a) dehydrated foods (b) frozen foods (c) dairy products (d) fresh fruits and vegetables (e) meat, poultry and sea foods.

**Unit III:** Packaging equipment and machinery: Vacuum, CA and MA packaging machine; gas packaging machine; seal and shrink packaging machine; form and fill sealing machine; aseptic packaging systems; bottling machines; carton making machines. Smart packaging systems for bacterial spoilage, water activity.

**REFERENCES**

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