

Food Packaging 3(2-1)

Theory

Food packaging: introduction, needs, functions, systems, development. Packaging types: primary, secondary, tertiary. Packaging materials: rigid containers, flexible packaging. Properties of food packaging: physical, chemical. Packaging guidelines: retail containers, shipping containers. Factors influencing design and selection of packaging materials: product, distribution, marketing, packaging operation, cost. Printing processes: inks, adhesives. Filling and labeling. Safety and legislation. Novel food packaging techniques. Food labeling: importance, types, methods.

Practical

Identification of packaging materials used for various food products. Requirements of foods for specific packaging material. Canning in metal containers. Can testing. Determination of shelf-life in various packaging materials. Vapor permeability test. Determination of film thickness. Visit to packaging industries.

Books Recommended

1. Lee, D.S., Yam, K.M and Piergiovanni, L. 2008. Food packaging science and technology. CRC Press, Taylor & Francis Group, Boca Raton, Florida, USA.
2. EIRI (Engineers India Research Institute). 2007. Handbook of packaging technology. Engineers India Research Institute, New Delhi, India.
3. Robertson, G.L. 2006. Food packaging: principles and practices. CRC Press, Taylor & Francis Group, Boca Raton, Florida, USA.

**Edited By Dr. Saqib Jabbar (Assistant Professor)
Institute of Food Science and Nutrition
University of Sargodha, Pakistan**