

Maharashtra Shikshan Samiti,  
**Maharashtra Mahavidyalaya, Nilanga**

Academic Year 2022-23

Department of B.Voc WPT

**Add On / Certificate Course Syllabus**

**Title : Fundamentals of Corrugated Packaging Technology**

Duration : 30 Hrs.

Marks : 50

**Introduction:**

This is a foundation course in understanding the various concept of packaging technology.

**Course Objectives :**

1. This course covers the basic of packaging.
2. This course give brief overview on various material used in packaging
3. This course covers the various details on the packaging testing methods.
4. This course highlights the various packaging laws and regulations.

**Course Outcomes :**

1. Learner can learn about the basic of packaging concept and materials used.
2. Learner can understand about various packaging material that are used.
3. Leaner can understands the importance of the product packaging.
4. Learner will able to understand about various packaging laws and its regulations.

**Course Content**

**Module I :**

( 7 Hours)

Need for packaging-Historical development-Who need packaging-Definition of packaging-  
Functions of packaging-Types of packaging-Packaging and consumer needs-Attributes that  
consumer appreciate-State of the art

**Module II :**

( 7 Hours)

Introduction-Paper Manufacturing Process, Paper and Paper board-Types and Properties.

Ink manufacturing process, types & characteristics.

Adhesives used in CFB boxes.

**Module III :**

( 7 Hours)

Introduction & Application of CF boxes in various

Plant -Single Facer Plant & automatic 5 ply corrugated

Machinery - Concepts and Introduction

Various Modes of Heating – Basics

Manufacturing Process – Concepts

Different Flutes / Styles – Concepts

Different Manufacturing Defects & Remedies

Plant Layout - Material Flow & Space Utilization

Innovation – Reusable Plastic corrugated box

**Module IV :**

( 9 Hours)

Adhesive-Labels-Caps & Closure-Tapes-Strapping-Pinning - Shrink and Stretch wrapping-Coding and Marking

**Kraft Paper** - Grammage Tester (GSM), Bursting Strength BS/BF COBB, Ring Crush Tester

**Corrugated Board** -Puncture Resistance Tester, Bursting Strength Tester, Edge Crush Tester.

**Corrugated Box**-Box Compression, Drop Tester, Vibration Tester, Impact Resistance Tester.

**Prescribed Text Books / Recommended Books :**

1. F. A Paine, Fundamentals of Packaging Technology, Blackie and Sons.
2. A. S Athalye, Plastics in Packaging, Tata Mcgraw Hill, New Delhi.
3. Joseph Hanlon, Handbook of Packaging Engineering.
4. Yam K. L. The Wiley Encyclopedia of Packaging Technology, 3<sup>rd</sup> Edition, Wiley 2009.
5. Byett. J, Packaging Technology, 2<sup>nd</sup> Edition, The Institute Packaging (SA), 2001.
6. Saroka W. Fundamental of Packaging Technology, 3<sup>rd</sup> Edition, IOPP, 2002.

---

**Scheme of Evaluation**

Q.1. Multiple Choice Question - 25  
points)

Credit – 1 (25

Q.2. Practical Test -25

Credit – 1 ( 25 points)

---

Credits – 2 (50 points)