	TOPICS
S.no	Topic
3.110	·
1	History, Future growth, and sustainability of corrugated boxes When and how it was discovered.
	How it evolved over the years
	World corrugated market
	Indian corrugated market
2	Types of corrugated boxes
	Shippers
	Printed cartons
	Fitments
	Case codes
3	How Corrugated boxes are made
•	Types of boards
	Liners and medium
	Process semi and auto
4	Overview of Paper making process
	Fibres
	Manufacturing process
5	Types of flute profiles and their functional properties
	Properties of flutes
	Types of flute profiles
	Impact of various flute profile variables on strength properties of corrugated
	board.
6	Properties of Kraft paper relevant to corrugated box manufacturing
	GSM, BS, RCT, COBB, Moisture & Others like Tear Factor, Double Fold, Stretch
7	The strength properties of corrugated board and boxes
	BS, ECT, FCT, PR, Bending Stiffness, CS, Cobb
8	Testing of paper and corrugated boxes
9	Fundamentals of compression strength of corrugated boxes
	Mapping and co-relation
	Relation of Moisture, Time on stacking strength
	Compression strength formula Relation between ECT and RCT
	Weight ratio of liner and medium
10	Factors affecting the compression strength of corrugated boxes.
10	Due to converting operations.
	That is converting corrugated board to corrugated box.
	Due to design aspect of box like
	Type, Paper grade, Impact of height and Length to width ratio
	Distribution environment.
11	Determining the compression strength requirements of boxes
	How to find out impact of environmental conditions on compression strength
	Determine required compression strength for corrugated box based on gross
	weight
	Why fluting paper should be different grade from liner.
12	
12	Influence of moisture and temperature on flat crush strength of corrugated board.
	· · · · · · · · · · · · · · · · · · ·
13	board. Properties of Substrate, Printing plates, and Inks What should be properties of paper to get good quality graphics
13	board. Properties of Substrate, Printing plates, and Inks What should be properties of paper to get good quality graphics Properties of printing plates
13	board. Properties of Substrate, Printing plates, and Inks What should be properties of paper to get good quality graphics Properties of printing plates Properties of inks
13	board. Properties of Substrate, Printing plates, and Inks What should be properties of paper to get good quality graphics Properties of printing plates

16	Fundamentals of Starch Adhesives – A Technical perspective
17	Fundamentals of Starch Adhesives – A Management perspective
18	How much adhesive is required for making corrugated board?
19	How much heat is required for making corrugated board?
20	Corrugated blank sizing and scoring allowances.
	How to determine width and length (blank size) of corrugated board to make box
	What are tolerances of the industry
21	Costing methods of corrugated boxes.
	Various components of costing
	Costing by weight method
	Costing by square meter method
22	Keep the business alive. Focus on simple management of Capital, Workforce,
	and Resources. Accounts
	Firm performance
	Cash flow
	H. R. Compliance
23	Keep the business alive. Focus on simple management of Capital, Workforce,
	and Resources. Operations
	Inventory, Planning, Scheduling
	HR Performance – Retention, Evaluation, Training.
24	Shrinkage of paper – reasons and impact on box dimensions
	Why paper expands or shrinks
	What is impact of moisture on paper dimensions.
	It's impact on box dimensions.
25	Quality assurance programme in corrugated box unit.
	Quality of inward raw material
	In process quality check
	Quality inspection of outward material
26	Project work