

## **Atharva Institute of Management Studies**

### **Activity / Event report**

Name of event	: <b>FACULTY SPEAKS, Episode 13</b>
Date(s) of conduction	: 30 October 2021
No. of participants	: 14
Student coordinator/ committee	: Sneha Kamalpuria (MMS)
Resource person	: Prof. Sandeep Rasal
Designation	: Assistant Professor
Contact no.	: 9967710289
Email ID	: <a href="mailto:sandeep.rasal@atharvaims.edu.in">sandeep.rasal@atharvaims.edu.in</a>

# DESCRIPTION

## **Objectives:**

- Packaging Development.

## **Key Takeaways:**

- Overview on what is packaging development.
- Benefits of good packaging:
  - Protection
  - Safety
  - Attractiveness
  - Usability
  - Sustainability
- Types of Corrugated boxes / cartons:
  - Half-Slotted Container (HSC)
  - Regular Slotted Container (RSC)
  - Center Special Slotted Container (CSSC)
  - 1-2-3 Bottom Container with Tuck Top
  - Intergral Divider Container
  - Full Telescope Design Style Container (FTD)
  - One Piece Folder (OPF)
  - Wrap Around Blank
  - Display Tray or High Wall Tray
  - Roll End Tray with Locking Cover
  - Pre-glued Auto Bottom with RSC Top Flaps
- Specifications of corrugated box
  - Kraft Paper
  - Area of box
  - Weight

- Printing quality
- No. of Walls
- Fluting
- Compression strength
- Busting strength
- Specifications of kraft paper.
- Types of printing (on corrugated substrates):
  - Offset Lithographic printing
  - Flexography printing
  - Screen printing
- Manufacturing process of Corrugated box:
  - Printing
  - Die-cutting
  - Corrugation
  - Pasting
  - Folding
  - Gluing (taping or stitching)
- Understanding how the cost of packaging is determined with the help of a real-life example.
- Few words from Dr. R.G. Ratnawat, Director, AIMS.

# FLYER OF THE EVENT

The flyer is set against a white brick wall background. At the top left, there are logos for AIMS ATHARVA and ATHARVA SCHOOL OF BUSINESS. In the top right, there are yellow arrow graphics and a yellow circle containing the number 13, with the hashtag #facultyspeaks below it. The main text reads 'ATHARVA INSTITUTE OF MANAGEMENT STUDIES (Affiliated to Mumbai University) presents FACULTY SPEAKS'. Below this is a Zoom logo and a 'LIVE' button. The date and time are 'Oct 30th, 2021 10 - 11 AM (IST)'. A dark blue banner at the bottom contains the day 'SATURDAY', the speaker's name 'Prof. Sandeep Rasal', his qualifications 'B.Com., MBA, GDMM, DEIM', and the topic 'Packaging Development'. Social media icons and the website 'www.atharvaims.edu.in' are also present.

AIMS  
ATHARVA

ATHARVA  
SCHOOL OF BUSINESS

ATHARVA INSTITUTE OF  
MANAGEMENT STUDIES  
(Affiliated to Mumbai University)

13  
#facultyspeaks

presents

FACULTY  
SPEAKS

LIVE

Oct 30th, 2021  
10 - 11 AM (IST)

SATURDAY

Prof. Sandeep Rasal  
B.Com., MBA, GDMM, DEIM

Packaging Development

www.atharvaims.edu.in

Flyer Designed by: Piyush Chaudhary (MMS)

# GLIMPSES

Chrome File Edit View History Bookmarks Profiles Tab Window Help 90% Sat 30 Oct 11:05 AM

(no subject) - kamalpuria.sneha Meet - zsq-kvrq-pfd Meet - oor-vhmy-zhv Inbox (24) - paperpresentation

meet.google.com/zsq-kvrq-pfd

Apps Gmail YouTube Maps Translate Reading List

REC Sandeep Rasal is presenting

### CONTENTS:

- Quiz
- Benefits of good packaging
- Types of corrugated boxes
- Specification of Kraft Paper
- Walls and Ply
- Fluting
- Compression strength
- Types of printing
- Costing
- Manufacturing process of corrugated box

Monika Chopra

paperpresentati...

Priyanka Kumari

Bincy Baby

Pallavi Rane

Deepak Asarpota

Dr. R.G. Ratnawat

Abhay Desai

Reena Poojara

Sandeep Rasal

2 others

You

11:05 AM | zsq-kvrq-pfd

Mac dock: Safari, App Store, Messages, Mail, Photos, Google Meet, Calendar (OCT 30), Apple TV, Music, Podcasts, App Store, System Preferences, Chrome, Word, Excel, PowerPoint, Photos, Mail, Trash

Chrome File Edit View History Bookmarks Profiles Tab Window Help 89% Sat 30 Oct 11:15 AM

(no subject) - kamalpuria.sneha Meet - zsq-kvrq-pfd Meet - oor-vhmy-zhv Inbox (24) - paperpresentation

meet.google.com/zsq-kvrq-pfd

Apps Gmail YouTube Maps Translate Reading List

REC Sandeep Rasal is presenting

Glass bottle

HDPE Woven bags/sack

Blister pack

Aluminium Foil Strip packaging

Jute bags

Shrink wrap packaging

Stretch film

BOPP adhesive tape

BOPP film

Mixed Pickles

Priyanka Kumari

paperpresentati...

Vaibhav. Patil

Bincy Baby

Abhay Desai

Deepak Asarpota

Dr. R.G. Ratnawat

Ganesh Apte

Ansha Gupta

Sandeep Rasal

3 others

You

11:15 AM | zsq-kvrq-pfd

Mac dock: Safari, App Store, Messages, Mail, Photos, Google Meet, Calendar (OCT 30), Apple TV, Music, Podcasts, App Store, System Preferences, Chrome, Word, Excel, PowerPoint, Photos, Mail, Trash

Chrome File Edit View History Bookmarks Profiles Tab Window Help 88% Sat 30 Oct 11:18 AM

meet.google.com/zsq-kvrq-pfd

REC Sandeep Rasal is presenting

## BENEFITS OF GOOD PACKAGING

- **Protection** - humidity, light, heat and other external factors viz. transport, handling and storage
- **Safety** - information of the product and its safety, best before date and a list of ingredients, virgin material or recycled material
- **Attractiveness** - brand and marketing, stand out from the shelf or website, enhance sales, communicate company's values
- **Usability** - simple to open and close, easy to fold and sort after usage
- **Sustainability** - packaging materials' carbon footprint, re-usability and recyclability

7

11:18 AM | zsq-kvrq-pfd

Chrome File Edit View History Bookmarks Profiles Tab Window Help 88% Sat 30 Oct 11:21 AM

meet.google.com/zsq-kvrq-pfd

REC Sandeep Rasal is presenting

## TYPES OF CORRUGATED BOXES / CARTONS

<p>Half Slotted Container (HSC)</p>	<p>Regular Slotted Container (RSC)</p>
<p>Center Special Slotted Container (CSSC)</p>	<p>1-2-3 Bottom Container with Tuck Top</p>

8






11:21 AM | zsq-kvrq-pfd

Chrome File Edit View History Bookmarks Profiles Tab Window Help 87% Sat 30 Oct 11:29 AM

meet.google.com/zsq-kvrq-pfd

REC Sandeep Rasal is presenting

### SPECIFICATIONS OF KRAFT PAPER

Parameters	Testing equipment	Specifications (e.g.)
Physical / Organoleptic evaluation		Should be dry and free from foreign odour.
G.S.M.	 GSM tester	Std. GSM $\pm$ 5%
Colour / Shine		To be characteristic of Kraft paper.
Bursting Strength (Kg/cm <sup>2</sup> )	 Bursting Strength tester	a) 1.7 – 2.1 for 100 gm. b) 2.5 – 2.9 for 140 gm.
Bursting Factor		8 min
Cobb Value	 Cobb sizing tester	20 – 25g/m <sup>2</sup>
Moisture %	 Moisture tester	5.5 – 7%
Roll width (Deckle)		As per specs.

12

11:29 AM | zsq-kvrq-pfd

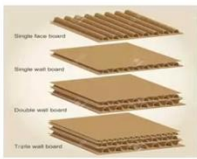
Monika Chopra, paperpresentati..., Vaibhav. Patil, Priyanka Kumari, Ganesh Apte, Bincy Baby, Pallavi Rane, Deepak Asarpota, Dr R.G. Ratnawat, Sandeep Rasal, 2 others, You

Chrome File Edit View History Bookmarks Profiles Tab Window Help 87% Sat 30 Oct 11:32 AM

meet.google.com/zsq-kvrq-pfd




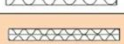


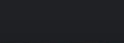
REC Sandeep Rasal is presenting

### WALLS AND PLY



2 ply  
Single wall - 3 ply  
Double wall - 5 ply  
Triple wall - 7 ply

### FLUTING

Flute Type	Cross Section Diagram	Height and Number of Flute
A		Height : 4.5 ~ 4.8mm No of Flute : 34 $\pm$ 2 / 30cm
B		Height : 2.5 ~ 2.8mm No of Flute : 50 $\pm$ 2 / 30cm
C		Height : 3.5 ~ 3.8mm No of Flute : 40 $\pm$ 2 / 30cm
E		Height : 1.0 ~ 1.2mm No of Flute : 93 $\pm$ 2 / 30cm
BA		Type B & A (Double boards)
BB		Type B & B (Double boards)
EB		Type B & E (Double boards)

13

11:32 AM | zsq-kvrq-pfd

Monika Chopra, paperpresentati..., Vaibhav. Patil, Priyanka Kumari, Ganesh Apte, Bincy Baby, Pallavi Rane, Deepak Asarpota, Dr R.G. Ratnawat, Sandeep Rasal, 3 others, You

Chrome File Edit View History Bookmarks Profiles Tab Window Help 86% Sat 30 Oct 11:36 AM

(no subject) - kamalpuria.sne... Meet - zsq-kvrq-pfd Meet - oor-vhmy-zhv Inbox (24) - paperpresentation


meet.google.com/zsq-kvrq-pfd

Apps Gmail YouTube Maps Translate Reading List

REC Sandeep Rasal is presenting

### TYPES OF PRINTING (On corrugated substrates)

**Offset Lithographic printing** – It is a method of mass-production printing in which the images on **metal plates** are transferred (offset) to **rubber blankets** or **rollers** and then to the print media.

**Flexography printing** - In Flexo printing an imaged sleeve, **cylinder**, or plate applies graphics or text onto a substrate.

**Screen printing** - Screen printing is the process of transferring a stenciled design onto a flat surface using a **mesh screen**, **ink** and a **squeegee**.



Monika Chopra paperpresentati... Vaibhav. Patil

Priyanka Kumari Ganesh Apte Bincy Baby

Pallavi Rane Deepak Asarpota Dr R.G. Ratn...

Sandeep Rasal 3 others You

11:36 AM | zsq-kvrq-pfd

System tray: Safari, Photos, Messages, Mail, App Store, Music, Podcasts, TV, Google, Word, Excel, PowerPoint, System Preferences, Trash

Chrome File Edit View History Bookmarks Profiles Tab Window Help 86% Sat 30 Oct 11:39 AM

(no subject) - kamalpuria.sne... Meet - zsq-kvrq-pfd Meet - oor-vhmy-zhv Inbox (24) - paperpresentation

meet.google.com/zsq-kvrq-pfd




Apps Gmail YouTube Maps Translate Reading List

REC Sandeep Rasal is presenting

### ARTWORK

**Shade card: LSD**

L - Light  
S - Standard  
D - Dark

Monika Chopra paperpresentati... Vaibhav. Patil

Priyanka Kumari Abhay Desai Bincy Baby

Pallavi Rane Deepak Asarpota Dr R.G. Ratnawat

Sandeep Rasal 3 others You

11:39 AM | zsq-kvrq-pfd

System tray: Safari, Photos, Messages, Mail, App Store, Music, Podcasts, TV, Google, Word, Excel, PowerPoint, System Preferences, Trash



Chrome File Edit View History Bookmarks Profiles Tab Window Help 85% Sat 30 Oct 11:43 AM

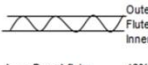
(no subject) - kamalpuria.sneha Meet - zsq-kvrq-pfd Meet - oor-vhmy-zhv Inbox (24) - paperpresentation

meet.google.com/zsq-kvrq-pfd

Apps Gmail YouTube Maps Translate Reading List

REC Sandeep Rasal is presenting

### COSTING

Grammage of paper (gm/cm <sup>2</sup> )	<ul style="list-style-type: none"> <li>Cut paper into 10 cm x 10 cm</li> <li>Weight it on GSM tester</li> </ul> $\text{GSM} = \frac{\text{Wt} \times 10^4}{100 \text{ cm}^2} = \text{e.g. } \frac{1.40 \text{ gm} \times 10^4}{100} = 140 \text{ gsm}$																								
Burst Factor (BF)	$= \frac{\text{Bursting Strength}}{\text{Grammage}} \times 1000 = \frac{8}{420 \text{ gsm}} \times 1000 = 19 \text{ BF}$																								
Total grammage of paper	 <table border="1"> <tr> <td>A → Broad flute</td> <td>48% on 140 gsm</td> <td></td> <td></td> </tr> <tr> <td>B → Narrow flute</td> <td>35% on 140 gsm</td> <td></td> <td></td> </tr> <tr> <td></td> <td>140 gsm</td> <td>100%</td> <td>140.00</td> </tr> <tr> <td></td> <td>140 gsm</td> <td>148%</td> <td>207.20</td> </tr> <tr> <td></td> <td>140 gsm</td> <td>100%</td> <td>140.00</td> </tr> <tr> <td></td> <td></td> <td></td> <td><u>487.20 gsm</u></td> </tr> </table>	A → Broad flute	48% on 140 gsm			B → Narrow flute	35% on 140 gsm				140 gsm	100%	140.00		140 gsm	148%	207.20		140 gsm	100%	140.00				<u>487.20 gsm</u>
A → Broad flute	48% on 140 gsm																								
B → Narrow flute	35% on 140 gsm																								
	140 gsm	100%	140.00																						
	140 gsm	148%	207.20																						
	140 gsm	100%	140.00																						
			<u>487.20 gsm</u>																						

17

Monika Chopra

paperpresentati...

Vaibhav. Patil

Priyanka Kumari

Abhay Desai

Bincy Baby

Pallavi Rane

Deepak Asarpota

Dr R.G. Ratnawat

Sandeep Rasal

G R

3 others

You

11:43 AM | zsq-kvrq-pfd

System tray icons: Calendar (OCT 30), Apple TV, Music, Podcasts, App Store, Settings, Chrome, Word, Excel, PowerPoint, Photos, Mail, Messages, Safari, Spotlight.

Chrome File Edit View History Bookmarks Profiles Tab Window Help 84% Sat 30 Oct 11:48 AM

(no subject) - kamalpuria.sneha Meet - zsq-kvrq-pfd Meet - oor-vhmy-zhv Inbox (24) - paperpresentation


meet.google.com/zsq-kvrq-pfd

Apps Gmail YouTube Maps Translate Reading List

REC Sandeep Rasal is presenting

### MANUFACTURING PROCESS OF CORRUGATED BOX

- Printing
- Die-cutting
- Corrugation
- Pasting
- Folding
- Gluing (taping or stitching)



19

Monika Chopra

paperpresentati...

Vaibhav. Patil

Priyanka Kumari

Abhay Desai

Bincy Baby

Pallavi Rane

Deepak Asarpota

Dr R.G. Ratnawat

Sandeep Rasal

G R

4 others

You

11:48 AM | zsq-kvrq-pfd

System tray icons: Calendar (OCT 30), Apple TV, Music, Podcasts, App Store, Settings, Chrome, Word, Excel, PowerPoint, Photos, Mail, Messages, Safari, Spotlight.

Chrome File Edit View History Bookmarks Profiles Tab Window Help 84% Sat 30 Oct 11:51 AM

(no subject) - kamalpuria.sneha Meet - zsq-kvrq-pfd Meet - oor-vhmy-zhv Inbox (24) - paperpresentation

meet.google.com/zsq-kvrq-pfd

Apps Gmail YouTube Maps Translate Reading List

REC Sandeep Rasal is presenting

11:51 AM | zsq-kvrq-pfd

Chrome File Edit View History Bookmarks Profiles Tab Window Help 84% Sat 30 Oct 11:52 AM

(no subject) - kamalpuria.sneha Meet - zsq-kvrq-pfd Meet - oor-vhmy-zhv Inbox (24) - paperpresentation

meet.google.com/zsq-kvrq-pfd

Apps Gmail YouTube Maps Translate Reading List

REC Sandeep Rasal is presenting

11:52 AM | zsq-kvrq-pfd

Chrome File Edit View History Bookmarks Profiles Tab Window Help 84% Sat 30 Oct 11:53 AM

(no subject) - kamalpuria.sneha Meet - zsq-kvrq-pfd Meet - oor-vhmy-zhv Inbox (24) - paperpresentation

meet.google.com/zsq-kvrq-pfd

Apps Gmail YouTube Maps Translate Reading List

REC Sandeep Rasal is presenting



Monika Chopra Sandeep Ra... Vaibhav. Patil

Ganesh Apte Abhay Desai Bincy Baby

Pallavi Rane Deepak Asarpota Dr R.G. Ratnawat

paperpresentati... 4 others You

11:53 AM | zsq-kvrq-pfd



Chrome File Edit View History Bookmarks Profiles Tab Window Help 83% Sat 30 Oct 11:55 AM

(no subject) - kamalpuria.sneha Meet - zsq-kvrq-pfd Meet - oor-vhmy-zhv Inbox (24) - paperpresentation

meet.google.com/zsq-kvrq-pfd

Apps Gmail YouTube Maps Translate Reading List

REC Sandeep Rasal is presenting



Sandeep Rasal Ganesh Apte

paperpresentati... Dr R.G. Ratnawat Pallavi Rane

Abhay Desai Deepak Asarpota Monika Chopra

Vaibhav. Patil 4 others You

11:55 AM | zsq-kvrq-pfd



Chrome File Edit View History Bookmarks Profiles Tab Window Help 83% Sat 30 Oct 11:56 AM

(no subject) - kamalpuria.sne... Meet - zsq-kvrq-pfd Meet - oor-vhmy-zhv Inbox (24) - paperpresentation

meet.google.com/zsq-kvrq-pfd

REC Sandeep Rasal is presenting

11:56 AM | zsq-kvrq-pfd

Chrome File Edit View History Bookmarks Profiles Tab Window Help 83% Sat 30 Oct 11:57 AM

(no subject) - kamalpuria.sne... Meet - zsq-kvrq-pfd Meet - oor-vhmy-zhv Inbox (24) - paperpresentation

meet.google.com/zsq-kvrq-pfd

REC Sandeep Rasal is presenting

Sl no.	Product	Packing	Type	GSM	BF	BS	L	W	H	Single Deckle (in cm)	Double Deckle (in cm)	Line	Area	Grammage	Wt of the layer (in grms)	Wt of paper (in kgs.) Incl. of wastage	Paper cost per CBB	Conversion cost 5.00 (per kg)
1	LP (SINGLE COL)	12 X 650 ml	3	120	18		300	225	285	51.60	103.20		603215	120.00	72.386	0.075	18.63	1.40
2	KFL / NFS PINT (SINGLE COL)	24 X 330 ml	3	120	18	2.16	375	250	230	48.50	97.00		670650	120.00	80.478	0.084	18.63	1.56
3	CAN DOUBLE PACK (SINGLE COL - KFC, KFSC, LP, ZIN)	48 X 330 ml	3	120	18	2.16	405	280	240	52.50	105.00		789250	140.00	93.891	0.098	18.63	1.82

11:57 AM | zsq-kvrq-pfd



**EVENT REPORT PREPARED BY:** SNEHA KAMALPURIA, STUDENT, MMS DIVISION B.

**Verified by:** Dr. Shubhi Lall Agarwal, Director, IQAC, AIMS.

**Submitted to:** Dr. R.G. Ratnawat, Director, Atharva Institute of Management Studies.

*This video was recorded on the Email ID [paperpresentation@atharvacoe.ac.in](mailto:paperpresentation@atharvacoe.ac.in)*

Live session was initiated by Sneha Kamalpuria.