

**Name of the faculty – priyanka virha**

**Subject – Architectural DESIGN 1, AR-111**

**SCHEME - MID SEM- 30, QUIZ/ ASSIGNMENT / SESSIONAL – 20, LAB AND  
SESSIONAL 50 TOTAL-**

**AIM – To understand fundamentals of Design as a basic creative activity.**

<b>S.NO</b>	<b>OBJECTIVES</b>	<b>EXERCISE / ACTIVITY</b>	<b>OUTCOME</b>
1.	To understand characteristics of each Elements of design	Compositions through each element. Characteristics	Understanding characteristics of each design element and psychology of shapes and forms
2.	To understand Design principles	1. Drawing each principle of design separately on drawing sheet 2. 2d compositions 3. 3d compositions)	Understanding the use of design elements according to desired concept or idea. For understanding additive abstraction and Subtractive abstraction
3.	To understand Color theory	Logos collection sheet for analytical thinking presentation – emphasis on elements and principles of design.  Logo design – creative thinking - architectural firm, bank, hospital and resort.	Understanding use of color as design element for various themes and concepts
4.	To understand Form and building (models )	1) Drawing all types shapes using design elements. 2) converting shapes to forms From 2d to 3d 3. 2d compositions.	For understanding ratio , proportion and scale
5.	To understand Product Design	Sketching for improving observation and memory drawing	Understanding user , material choice and functionality of

		of products for better imagination. Product analysis.	products according to its target audiences – design a prototype
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**PRODUCT DESIGN** –Product design with emphasis on user, purpose and material & form.

**AIM:** To understand product design with emphasis on user, purpose and material & form.

**OBJECTIVE:** To understand target audiences, purpose, material &form through product analysis.

**DESIGN BRIEF** – you are supposed to Design a product of your own choice.

Product – **DESK CALANDER**

### **EXERCISES BEFORE PRODUCT DESIGN**

Research about its users like Target group, material and purpose of the product.

1. Reason for designing a product according to type of the product
2. First product appreciation based on parameters below.
3. Selection of the products for analysis only (one exercise with different products )
4. Product Analysis – based on these parameters

- Aesthetics
- Functionality
- Flexibility
- Multipurpose use
- Cost –effectiveness
- Durability
- User friendly
- Eco –friendly
- Pros and cons, identifying the gaps, then modifying it or re-design it.

#### **Design Requirements –**

Conceptual sketches for your lamps – Initial sketches for deciding height, thickness, smoothness, color, texture, and intended material, addition of parts or subtraction of different parts of the product.

Studio work - prototype of your Desk calander Design

## POINT

IT IS THE SMALLEST ELEMENT OF GRAPHIC DESIGN DESIGNING WITH POINT CAN CREATE A WIDE VARETY OR VISUAL EFFECTS.

## LINE

A CONTINUOUS MARK ON A SURFACE BY A MOVE ME FROM THE BIGINING TO THE ENDING.

## SHAPE

A VISUAL ELEMENT THAT TWO DIMENSIONS LENGTH AND WIDTH.

## FORM

THREE - DIMENSIONAL HAVING HEIGHT, WIDTH AND DEPTH. WHICH ENDLESS VOLUME.

## TEXTURE

SURFACE QUALITIES THE LOOKS OR FEEL OF OBJECTS.

## COLOR

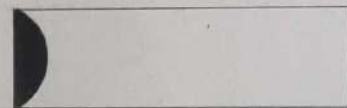
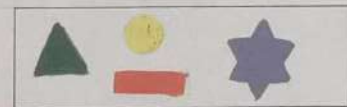
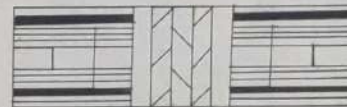
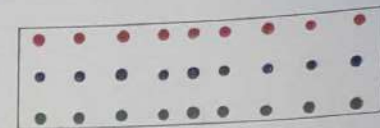
PROPERTIES OF HUE (RED, BLUE, ETC) INTENSITY (PURITY AND STRENGTH OF A COLOR) AND VALUE.

## VALUE

DESCRIBES THE LIGHTNESS OR DARKNESS OF A COLOR, GRADUAL IN DRAWINGS, WOODCUTS, ETC EVEN WHEN COLOR IS ABSENT.

## SHAPE

A VISUAL ELEMENT THAT TWO DIMENSIONS LENGTH AND WIDTH.



ELEMENTS OF DESIGN

R

# BALANCE

BALANCE IS THE DISTRIBUTION OF THE VISUAL WEIGHT OF OBJECTS, COLOUR, TEXTURE AND SHAPE EVERYTHING WORK TOGETHERE IN A SEAMLESS HOLE.

# RHYTHM

A RELATIONSHIP BETWEEN ELEMENTS THAT CREATES A SENSE OF HARMONY. IT CREATES A VISUAL IN ARTWORK AND PROVIDE PATH FOR THE VIEWERS EYE TO FOLLOW.

# PATTERN

A DESIGN IN WHICH THE ELEMENTS ARE REPEATED IN A REGULAR OR IRREGULAR WAY.

# HARMONY

THE VISUALLY SATISFYING EFFECT OF COMBINING SIMILAR OR RELATED ELEMENT.

# EMPHASIS

THE PART OF DESIGN THAT CATCHES THE VIEWERS ATTENTION THE AREA COULD BE DIFFERENT IN SOME, COLOUR, TEXTURE, SHAPE ETC.

# VARIETY

USE OF SEVERAL ELEMENT OF DESIGN TO HOLD THE VIEWER'S ATTENTION IT CAN BE CREATED THROUGH THE USE OF COLOURS, SHAPES, IMAGES AND OTHER VISUAL ELEMNTS.

# UNITY

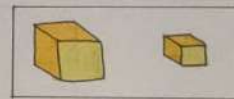
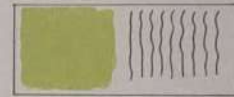
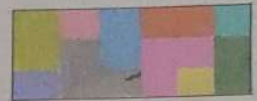
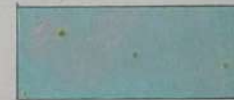
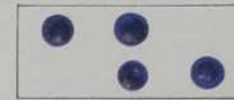
THE FEELING OF HARMONY BETWEEN ALL PARTS OF ART WHICH CREATES A SENSE OF COMPLETENESS.

# SCALE

THE RELATIVE SIZE OF AN ELEMENT IN A WHEN TO ANOTHER ELEMENT.

# CONTRAST

CONTRAST IS A PRINCIPLE OF DESIGN THAT EMPHASIZES DIFFERENCES BETWEEN THE ART ELEMENTS.



# PRINCIPLES OF DESIGNS

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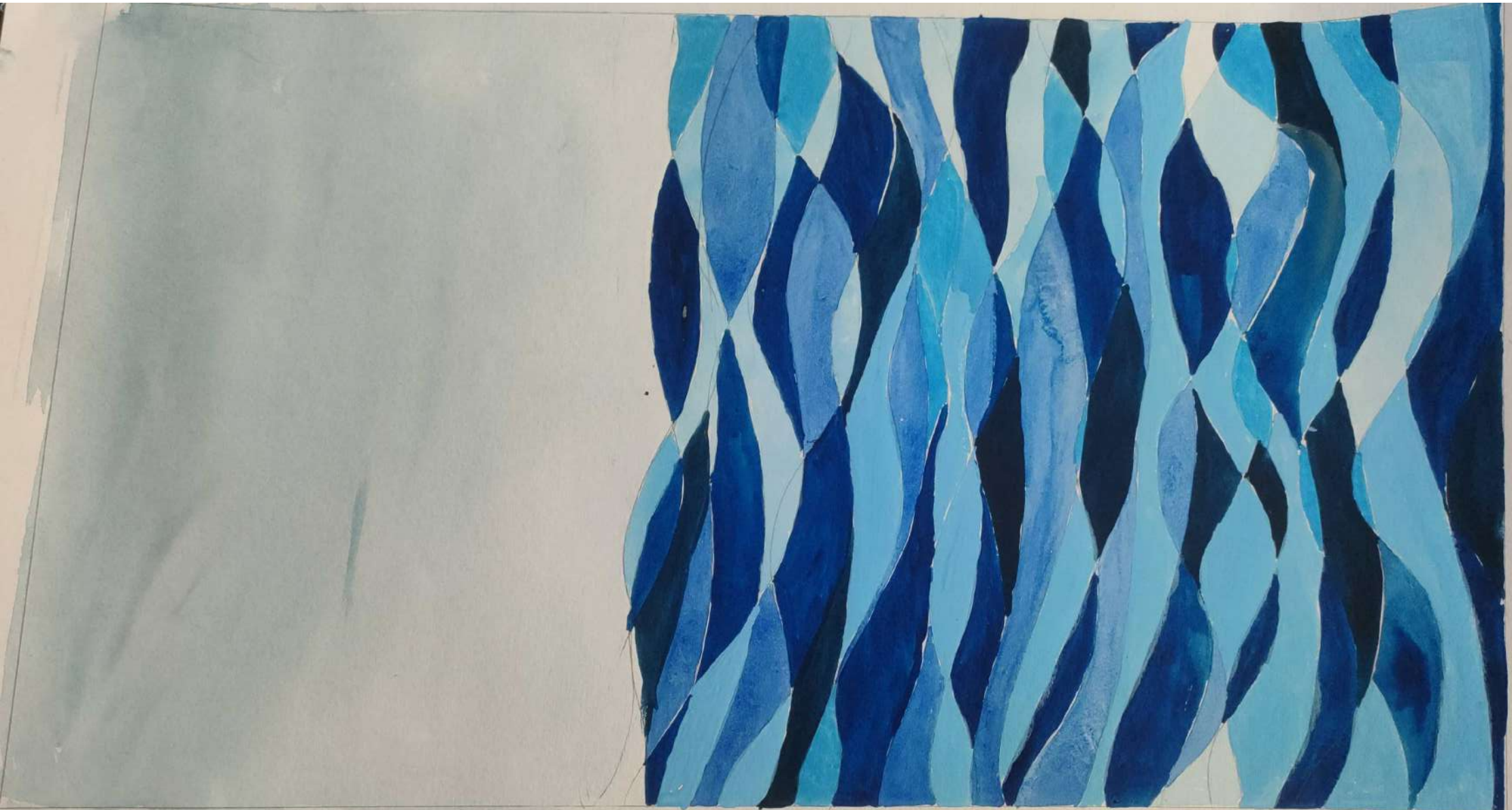


DESIGN COMPOSITION

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DESIGN COMPOSITION



DESIGN COMPOSITION



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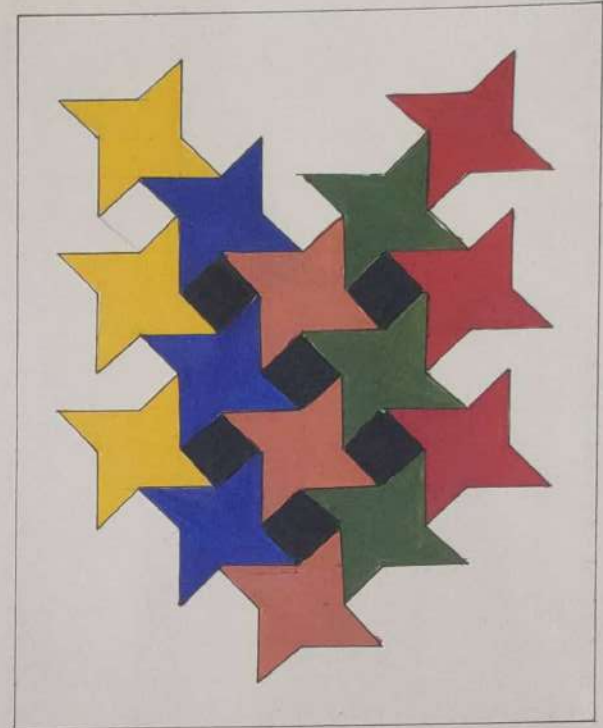
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DESIGN

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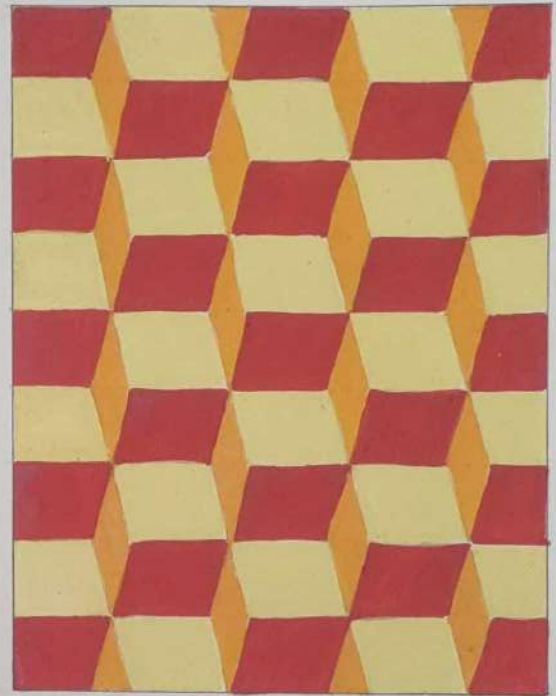
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DESIGN COMPOSITION



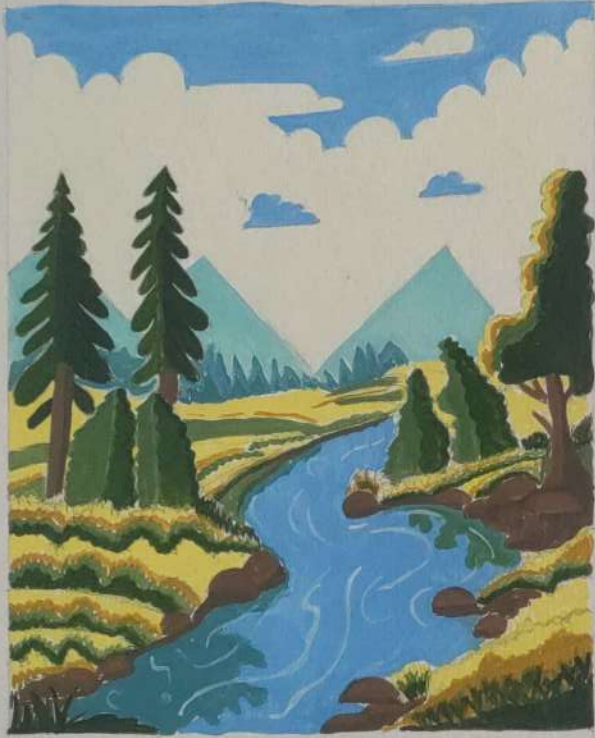
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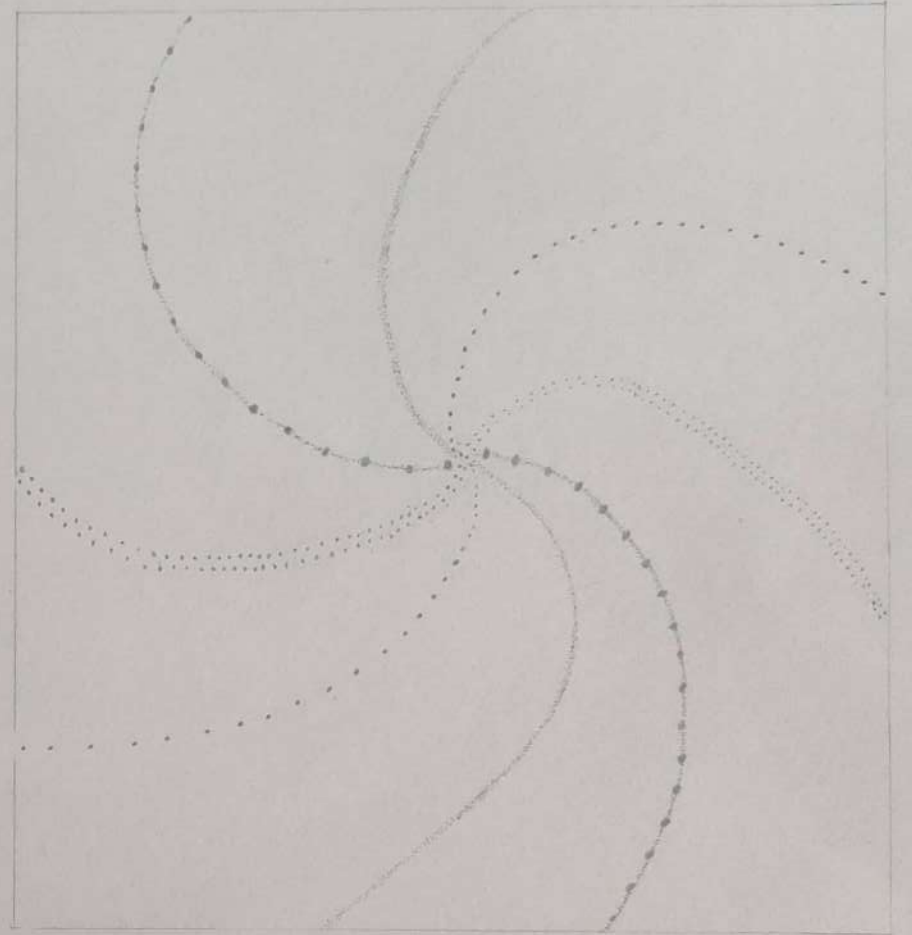
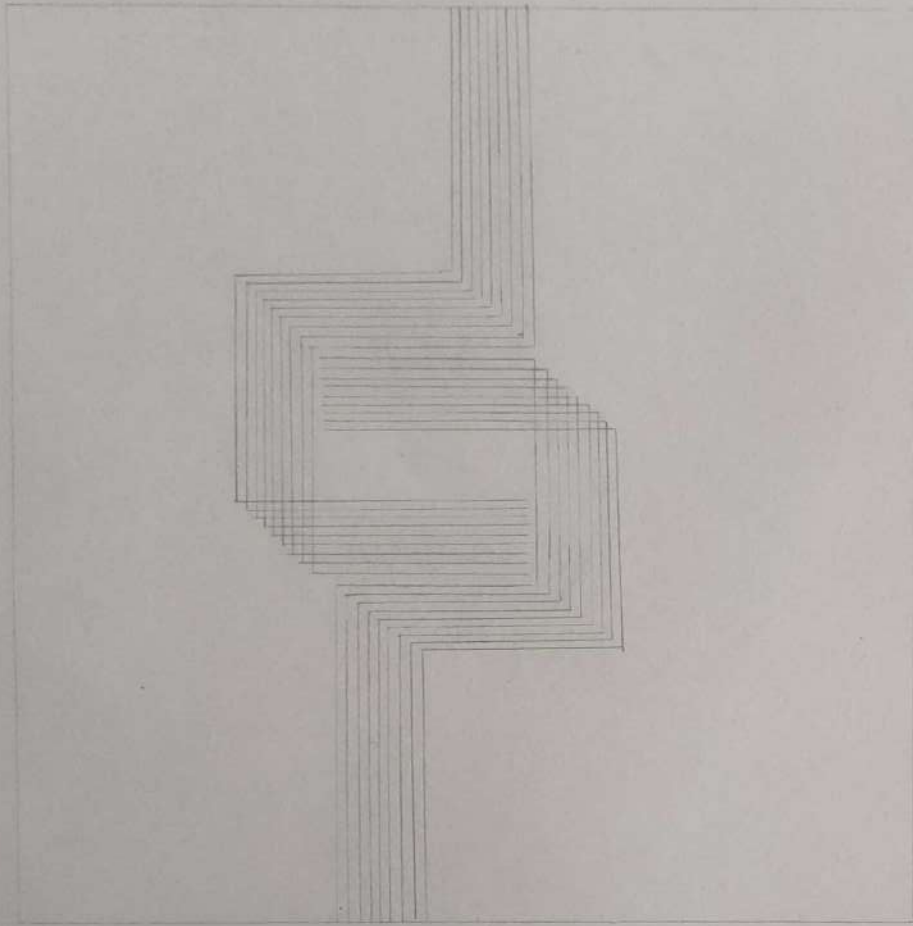
Rhythm

DESIGN COMPOSITION

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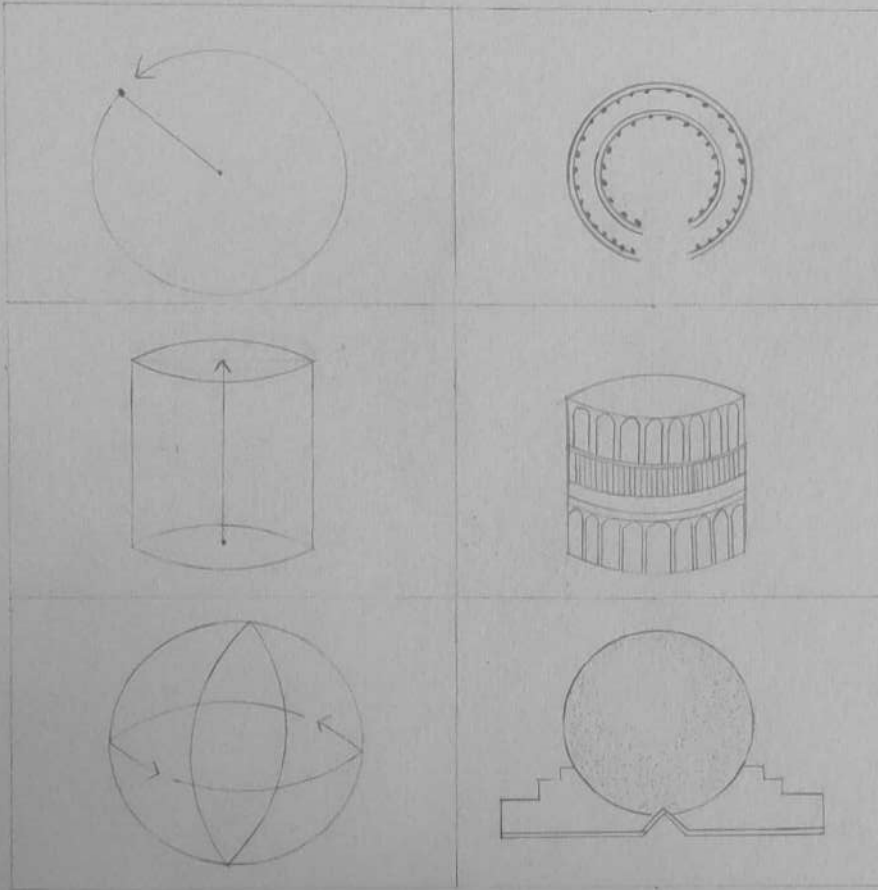


DESIGN COMPOSITION

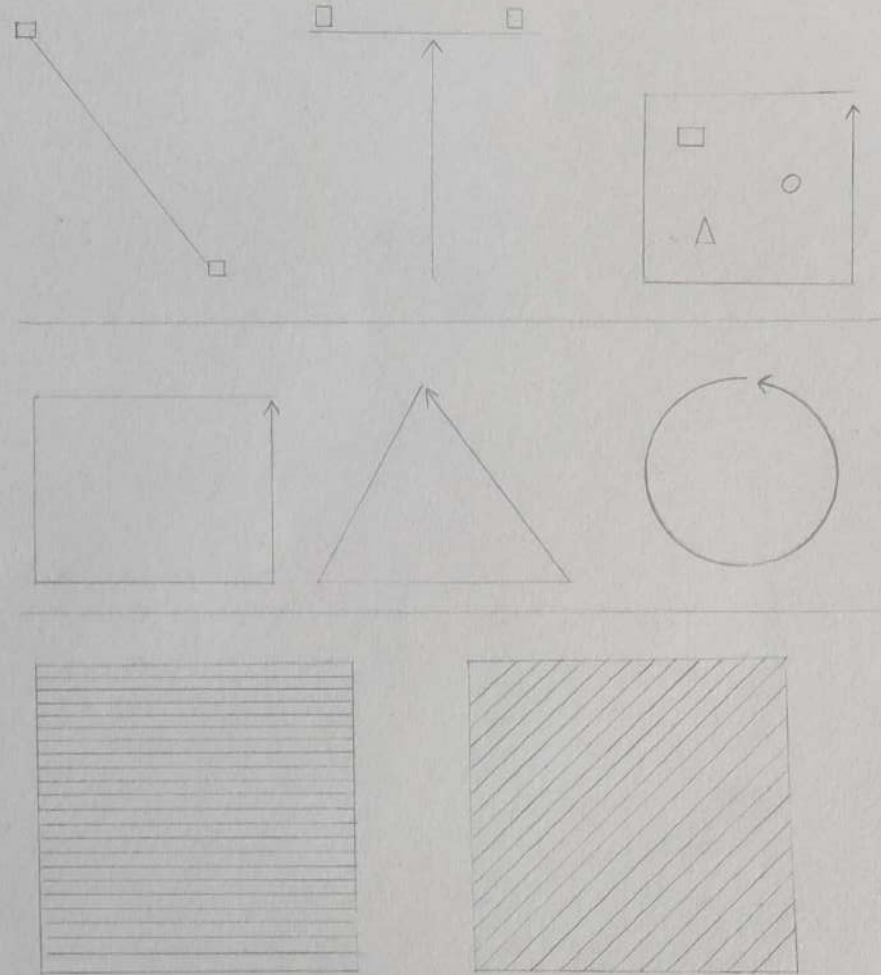


LINE AND DOT COMPOSITION

THE CIRCLE, CYLINDER AND SPHERE ARE POINT-GENERATED

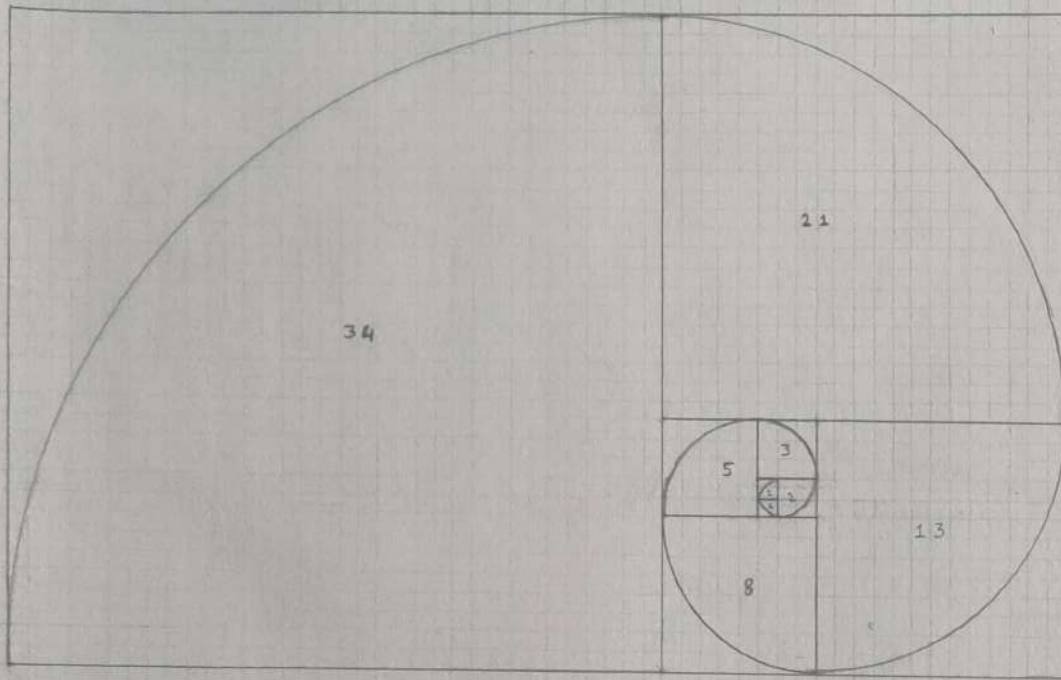


LINE



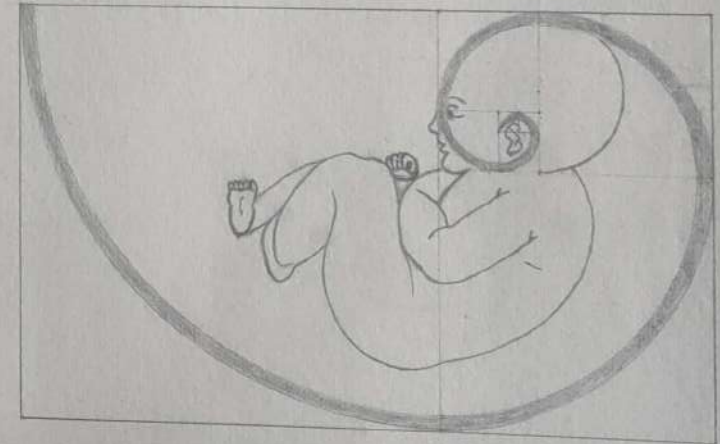
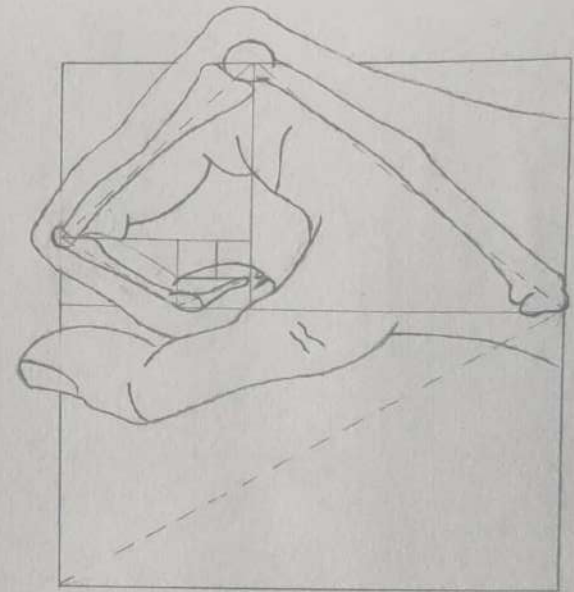
POINT AND LINE COMPOSITION





FIBONACCI ALSO KNOWN AS LEONARDO BONACCI, WAS AN ITALIAN MATHEMATICIAN FROM THE REPUBLIC OF PISA CONSIDERED TO BE THE MOST TALENTED WESTERN MATHEMATICIAN OF THE MIDDLE AGES. HE WAS BORN IN THE YEAR 1170 AND DIED IN YEAR 1250 AT THE AGE OF 80. FIBONACCI POPULARIZED THE INDO-ARABIC NUMERAL SYSTEM THROUGH HIS COMPOSITION IN 1202 OF LIBER ABACI.

FIBONACCI SERIES - 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, ...



FIBONACCI SERIES

NAM

SHEET NO.



## LUDWIG MIES VAN DER ROHE

**BORN** - MARCH 27, 1886  
AACHEN, KINGDOM  
OF PRUSSIA  
**DIED** - AUGUST 17, 1969  
CHICAGO, U.S.

**AWARDS**  
POUR LE MERITE (1959)  
ROYAL GOLD MEDAL (1959)  
AIA GOLD MEDAL (1960)  
PRESIDENTIAL MEDAL OF  
FREEDOM (1963)

## ABOUT THE ARCHITECT

- MARCH 27 1886 LUDWIG MIES VAN DER ROHE WAS BORN IN AACHEN, GERMANY.
- LUDWIG BEGAN HIS CAREER IN HIS FAMILY STONE-CARVING BUSINESS IN GERMANY.
- HE NEVER RECEIVED ANY FORMAL ARCHITECTURAL TRAINING, BUT WHEN HE WAS A TEENAGER HE WORKED AS A DRAFTSMAN FOR A STUCCO-DECORATING FIRM.
- AT THE AGE OF 19, WHILE MOVING TO BERLIN, HE FOUND WORK IN THE OFFICE OF ARCHITECT AND FURNITURE DESIGNER BRUNO PAUL.
- FROM 1908-1912 HE WORKED WITH INDUSTRIAL ARCHITECT PETER BEHRENS.
- IN 1912, MIES OPENED HIS OWN PRACTICE IN BERLIN AND STUDIED THE ARCHITECTURE OF THE PRUSSIAN KARL FRIEDRICH SCHINKEL AND FRANK LLOYD WRIGHT.
- IN 1913 MIES GOT MARRIED.
- AFTER WORLD WAR I, HE BEGAN STUDYING THE SKYSCRAPER AND DESIGNED TWO INNOVATIVE STEEL-FRAMED TOWERS ENCASED IN GLASS.
- IN 1930-1933 HE WAS DIRECTOR OF THE BAUHAUS SCHOOL UNTIL ITS DISBANDMENT.

## FAMOUS WORKS

- BARCELONA PAVILION, 1929.
- VILLA TUGENDHAT, 1930.
- FARNSWORTH HOUSE, 1951.
- CROWN HALL, 1956.
- SEAGRAM BUILDING, 1958.
- NEW NATIONAL GALLERY, BERLIN, 1968.
- KROLLER MULLER VILLA, 1913.
- BRICK COUNTRY HOUSE, 1924.
- ROSA LUXEMBURG MONUMENT, 1926.
- KREFELD HOUSE, GERMANY, 1928.
- CHICAGO FEDERAL COMPLEX, 1964.

## PHILOSOPHY

- THE ABSENCE OF ANY DECORATIVE TREATMENT WAS FUNDAMENTAL.
- HIS BUILDINGS RADIATE THE CONFIDENCE, RATIONALITY AND ELEGANCE OF THEIR CREATOR.
- HE FOLLOWED THE REDUCTIONIST APPROACH.
- HIS BUILDINGS WERE FREE OF ORNAMENTATION.
- HIS WORKS CONFESS THE ESSENTIAL ELEMENTS OF OUR LIVES.



## "LESS IS MORE"

### CHARACTER OF WORKS

- SIMPLE RECTANGULAR FORMS.
- OPEN, FLEXIBLE PLANS AND MULTI-FUNCTIONAL SPACES.
- EXPOSED AND VERY REFINED STRUCTURAL DETAILS.



LUDWIG MIES VAN DER ROHE

SUBJECT  
DESIGN

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SHEET NO.

(A) MUSEUM OF FINE ARTS, HOUSTON  
 MIES DESIGNED TWO BUILDINGS FOR THE MFAH AS ADDITIONS TO THE CAROLINE WIESS LAW BUILDING. HE DESIGNED TWO ADDITIONS TO THE BUILDING - CULLINAN HALL, COMPLETED IN 1958, AND THE BROWN PAVILION, COMPLETED IN 1974.



(A)



(B)

(B) FARNSWORTH HOUSE  
 BETWEEN 1946 AND 1951, MIES DESIGNED AND BUILT F.H., A WEEKEND RETREAT AT CHICAGO. HERE, MIES EXPLORED THE RELATIONSHIP BETWEEN PEOPLE, SHELTER, AND NATURE. IT IS SURROUNDED BY FOREST AND RURAL PRAIRIES.



(C)

(C) SEAGRAM BUILDING  
 MIES' SOLUTIONS SET A STANDARD FOR THE MODERN SKYSCRAPER. THE BUILDING BECAME A MONUMENTAL CONTINUITY OF BRONZE AND DARK GLASS CLIMBING UP 515 FEET TO THE TOP OF THE TOWER.



(D) CHICAGO FEDERAL COMPLEX  
 CHICAGO FEDERAL CENTER PLAZA, A UNIFIED THREE BUILDINGS OF VARYING SCALES. THE STRUCTURAL FRAMING OF THE BUILDINGS IS FORMED OF HIGH TENSILE BOLTED STEEL AND CONCRETE.



(D)

(E) S.R. CROWN HALL  
 WIDELY REGARDED AS MIES'S MASTERPIECE, CROWN HALL IN CHICAGO IS ONE OF THE MOST ARCHITECTURALLY SIGNIFICANT BUILDINGS OF THE 20<sup>TH</sup> CENTURY MODERNIST MOVEMENT. CROWN HALL WAS COMPLETED IN 1956.



(E)



(F)

(F) NATIONAL GALLERY, BERLIN  
 MIES'S LAST WORK WAS THE NEUE NATIONALGALERIE ART MUSEUM, THE NEW NATIONAL GALLERY FOR THE BERLIN NATIONAL GALLERY. CONSIDERED ONE OF THE MOST PERFECT STATEMENTS OF ARCHITECTURAL APPROACH.

# MIES FAMOUS WORKS

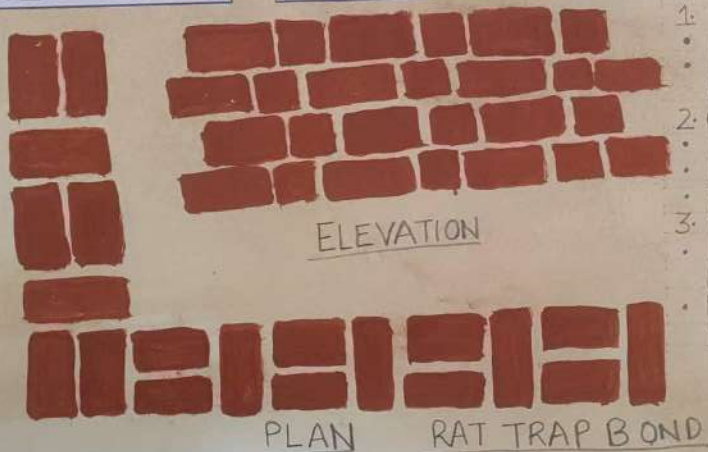
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SHEET NO.

## SKETCHES BY LAURIE BAKER

BAKER ALWAYS CARRIED HIS HOME MADE DIARY FASHIONED OUT OF OLD PIECES OF PAPER FROM ENVELOPES AND OTHER WASTE PLAIN PAPER WHEREVER HE WENT.

BAKERS ABILITY TO SKETCH WAS ONE OF THE MAIN REASON HE NEVER LEARNT INDIAN LANGUAGES SINCE WHENEVER PEOPLE DIDN'T UNDERSTAND ENGLISH HE WOULD WHIP OUT HIS DIARY AND SCRIBBLE A QUICK SKETCH TO EXPLAIN WHAT HE MEANT.



PLAN

RAT TRAP BOND

## STYLE OF LAURIE BAKER



1. BRICK THALI WALLS PERFORATED BRICK SCREEN UTILIZES NATURAL MOVEMENT TO COOL THE HOME INTERIOR.

2. TRADITIONAL INDIAN SLOPING ROOFS WITH GABLES AND VENTS.



3. REUSE OF MATERIAL BAKERS ARCHITECTURAL METHOD IS TO IMPROVISATION.

## PRINCIPLES

1. RESPECT FOR NATURE
  - PLACEMENT OF WATERBODY TO COOL DOWN THE BREEZE
  - MADE USE OF CONTOUR DURING PLANING RATHER THAN CUTTING.
2. COST-EFFECTIVENESS
  - MADE MAXIMUM UTILIZATION OF USED MATERIAL.
  - REDUCE THE USE OF FABRICATION
  - REDUCTION OF UNWANTED STRUCTURAL ELEMENTS
3. MINIMUM USE OF ENERGY INTENSIVE MATERIAL
  - USE OF LOCALLY MANUFACTURED MATERIAL LIKE BRICK, MANGLORE
  - MINIMUM USE OF GLASS WHENEVER NECESSARY.



NAME : LAURIE BAKER  
 BORN : MARCH 2, 1917 U.K.  
 DIED : APRIL 1, 2007  
 AWARDS : PADMA SHRI, ORDER OF THE BRITISH EMPIRE

## LIFE OF LAURIE BAKER

- BAKER STUDIED ARCHITECTURE IN BIRMINGHAM AND GRADUATED IN 1937 AGED 20. IN A PERIOD OF POLITICAL UNREST FOR EUROPE
- DURING THE SECOND WORLD WAR HE SERVED IN THE FRIENDS IN CHINA AND BURMA.
- HE WORKED FOR AN INTERNATIONAL AND INTERDENOMINATIONAL MISSION DEDICATED TO THE CARE OF THESE SUFFERING FROM LEPROSY.

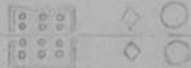
LAURIE BAKER-

## AXIS

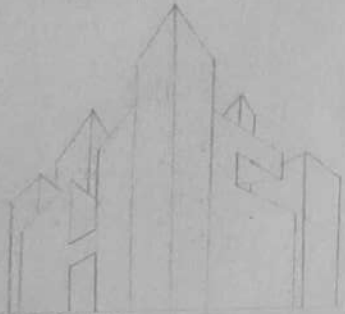
A LINE DRAWN BETWEEN TWO POINTS IN SPACE AND ABOUT WHICH FORMS AND SPACES CAN BE ARRANGED IN A REGULAR OR IRRREGULAR MANNER.



## SYMMETRY



THE BALANCED DISTRIBUTION OF EQUIVALENT FORMS AND SPACES ABOUT A COMMON LINE [AXIS] OR POINT [CENTRE].



## HIERARCHY



THE IMPORTANCE OR SIGNIFICANCE OF A FORM OR SPACE BASED ON ITS SIZE, SHAPE OR PLACEMENT RELATIVE TO OTHER FORMS OF THE ORGANIZATION.



## RHYTHM / REPETITION

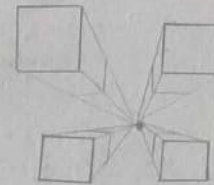


THE USE OF RECURRING PATTERNS TO ORGANIZE A SERIES OF LIKE FORMS OR SPACES.

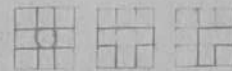
## DATUM



A LINE, PLANE, OR VOLUME THAT BY ITS CONTINUITY AND REGULARITY HELPS TO ORGANIZE A PATTERN OF FORMS AND SPACES.



## TRANSFORMATION



A PRINCIPLE THROUGH WHICH AN ARCHITECTURAL CONCEPT OR ORGANIZATION CAN BE RETAINED, STAINED, AND BUILT UPON THROUGH A NUMBER OF MANIPULATIONS.



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# ORDERING PRINCIPLES

# PRODUCT DESIGN

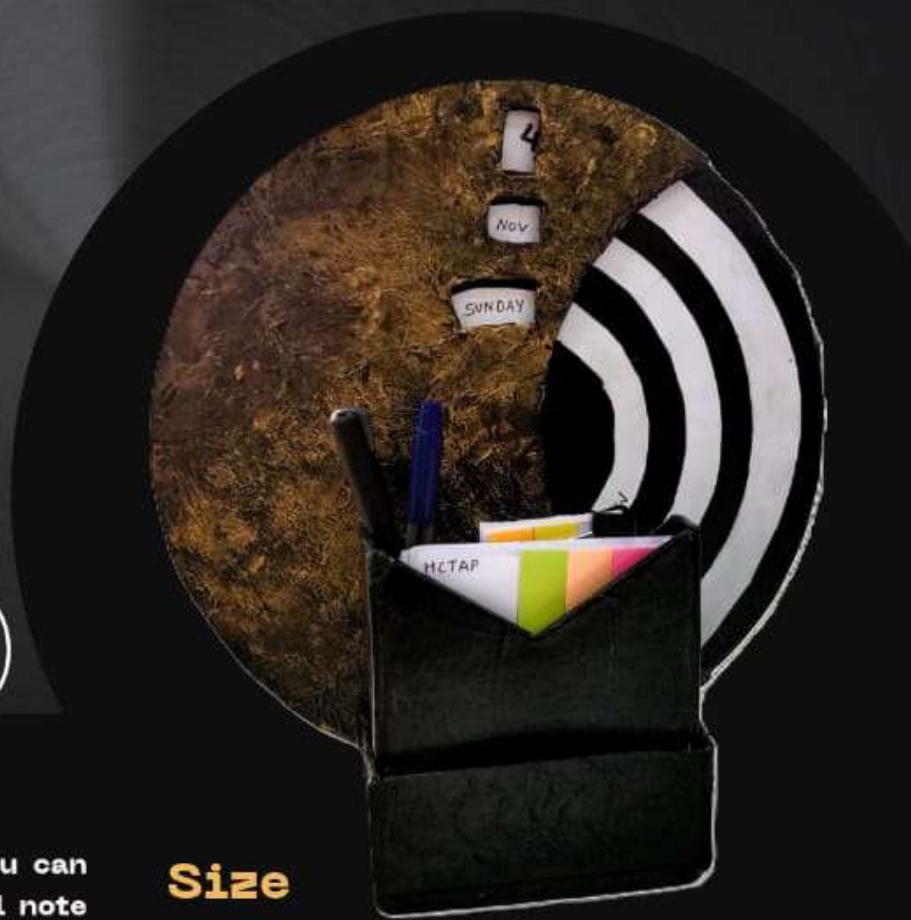
## DESK CALENDAR

### Abstract

The beautiful desk calendar, where you can keep your sticky bookmarks, pen, small note pad and cardholder. Three individual circular rings dedicated to dates, days, and months are placed in an indigenous manner, which may be rotated very easily and precisely to change days, dates, and months to give you a new day every day. It is very play full.

**Unique Design:** A lifetime yearly calendar that never expires, just you have to set 1st date and day, and then it is good to go. The calendar is designed in a unique style that is usually not seen very often The engraving on the calendar make every piece different from other. The desk calendar is manual, and the numbers and days can be changed every day. This beautiful work beautifully works next to a bed in the bedroom or next to a sofa in the living room ,office tables or study room etc . It boost the spatial reasoning and to keep the brain cells engage in constructive thinking. It can last longer in your possession with just a little care. This calendar is perfect for every home for teaching your children about days of the week, years, yesterday, today & tomorrow. It is also use ful for office for branding by adding your brand name for advertisement.

**"This can be created by diy  
"Best out of waste, substainable product"**



### Size

Diameter Of sphere – 23 cm

Thikness Of sphere – 12 mm

### Material

Foam board for sphere

White Sheets for rings

Tissue paper for texture work

Colours – golden & black (acrylic colour)  
fevikwik for pasting

### Shape, Colour & Texture Psychology

●Shape – Circular shape has been Taken because it It represent the concept of continuity and completeness. They symbolize the eternal whole because there is no beginning or end in circular constructions, which leads to their association with lofty ideas like karma or eternity.Which attracts Consumer.

●Colour – The power of black and gold to convey deep emotions and narratives. In visual arts, the contrast between the two colors creates a dramatic effect that draws the viewer's gaze. Whether it's a classic painting or a contemporary design, this color duo has the ability to evoke a wide range of emotions and interpretations.Which attracts each & every person of all age group.

●Texture – Texture has been done for attracting art lovers consumer. Which can be very aesthetically playful in decor.



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JANUARY

HITVA  
ARCHITECTURE & PLANNING  
PRADEEP K. BH. JAISWAL  
1<sup>ST</sup> FLOOR

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