

Visual Design and DTP

“N Scheme Syllabus”



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VISUAL DESIGN AND DTP

PREFACE

This book covers all the topics in a clear and organized format for the Second year Diploma in Printing Technology students as prescribed by the Directorate of Technical Education, Chennai, Tamilnadu. It is confidently believed that this book furnishes the students the necessary study material. The topics covered were neatly illustrated for better understanding of the students.

The book's step-by-step lessons in large, eye pleasing calligraphy make it suitable for both direct one-to-one tutoring and regular classroom use. The book is prepared in normal everyday English and is free from professional jargon characteristic of so many reading instruction books.

All of the lesson pages were carefully designed to eliminate distraction and to focus the pupil's full attention on the work at hand.

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DETAILED SYLLABUS

Unit	Name of the Topic	Hours
I	<p><i>Introduction to Design and Layout</i></p> <p>1.1 - Design, Introduction to graphic design – goal, audience, venue and budget.</p> <p>1.2 - Design elements - line, shape, value, format, texture-visual and tactile, type, color, and space-negative and positive.</p> <p>1.3 - Design Principles, Balance - Symmetrical and asymmetrical - Optical Centre, Unity, Emphasis, Contrast, rhythm, proportion and harmony.</p> <p>1.4 - Layout, definition, stages of layout - Visualization, Thumbnails, Rough layout and Comprehensive/final layout.</p>	15
II	<p><i>Typography</i></p> <p>2.1 - Measurements followed in typography – Point and Pica.</p> <p>2.2 - Anatomy of types – X height, Ascender and descender, baseline and body width. Parts of type face - arm, stroke, bracket, bowl, terminal, serif, hairline, count, stem and spine.</p> <p>2.3 - Type groups – sanserif, serif, novelty/decorative, black letter and roman old style, type face, type font, type family, type style, modern typefaces, display types, true type and open type.</p> <p>2.4 - Initials - raised and dropped.</p> <p>2.5 - Importance of Legibility and Readability, Vector fonts and bitmapped fonts, Logos and trademarks.</p>	15
III	<p><i>Colour Dynamics</i></p> <p>3.1 - Fundamentals of Colour, visible spectrum, primary, secondary and tertiary colours, subtractive colour and additive colour theory, process colour, spot colour/pantone, tint, shade and tones.</p> <p>3.2 - Colour wheel - purpose and diagram, monochromatic, analogue, complimentary, split complementary and triad colors.</p> <p>3.3 - Psychological effects of colours – warm and cool colours.</p> <p>3.4 - Setting the environment for Colour works - Color Temperature.</p>	15

Unit	Name of the Topic	Hours
IV	<p>Page Layout</p> <p>4.1 - Style of house, grids, guides and columns, templates, master page, style sheet, caption, quotes, headers and footers, folio, headlines, sub headlines and margins.</p> <p>4.2 - Handling originals/photo - cropping, scaling and skewing.</p> <p>4.3 - Layout format for Magazine, Newspaper, and Bookwork.</p> <p>4.4 - Minimalism – Minimalistic approach in design.</p>	14
V	<p>Print Publishing</p> <p>5.1 - Dummy preparation, proof reading, proof reading marks, printers mark - crop, trim, bleed and registration, considerations for print production.</p> <p>5.2 - Designing of other printed products – brochure, leaf let, visiting card, invitation, booklet and folders.</p> <p>5.3 - Tools and applications of Photoshop, Illustrator, CorelDraw, Adobe In-design, Quark Xpress .</p> <p>5.4 - Understanding file formats - TIFF, JPEG, PDF, GIF, EPS and PNG.</p>	14

Reference Books

1. Fundamentals of copy and layout (third edition): National text book company, Illinois,USA
2. Exploring Publication design: by Poppy Evans – Publisher: Thomson – Delmar learning;UK
3. Exploring Typography: by Tova Rabinowitz – Publisher: Thomson – Delmar learning; UK
4. Typography and typesetting- van Nostrand Reinhold,Newyork
5. Magazine Design-Stacey king-Rockport Publishers.

Unit-I

Introduction to Design and Layout

1.1 - Design – Introduction to graphic design – goal, audience, venue and budget.

Graphic design:

Graphic design is a creative process that combines art and technology to communicate ideas. The designer works with a variety of communication tools in order to convey a message from a client to a particular audience. The main tools are image and typography.

Goal:-

The purpose of the design application is to provide accessible information about ideas, products and services, to create a bond between the consumer and the client. Always remember that graphic design is functional and it must meet the client's and audience needs.

There are four goals you should keep in mind:

- ✓ Attract the reader
- ✓ Make your work easy to read
- ✓ Give your reader something to do
- ✓ Give the reader the desire and ability to do it.

Audience:-

Graphic design is aimed at mass audience that may vary in size and demographics.. Defining your audience will help you to understand whom you are designing for, while keeping their collective preferences, culture, taste and income in mind.

Venue:-

The communicator also needs to know what media or channels the target audience reads, views and trust. It could be radio, television, postcard, billboards, newspaper, newsletter, handbills, magazine and so on. Always use right words that understood by audience. Careful choice of words and arrangement of type and art on page and even the choice of paper are necessary.

Budget:-

Your clients are the one paying the bills. They have the products that need promotion. You must stay within their budget. Get all information from client and find out what goals the clients wants to achieve with the project. Also one should have the knowledge of process, raw material cost, delivery system, manpower requirement etc.

1.2 - Design elements - line, shape, value, format, texture-visual and tactile, type, color, and space-negative and positive.

Design:-

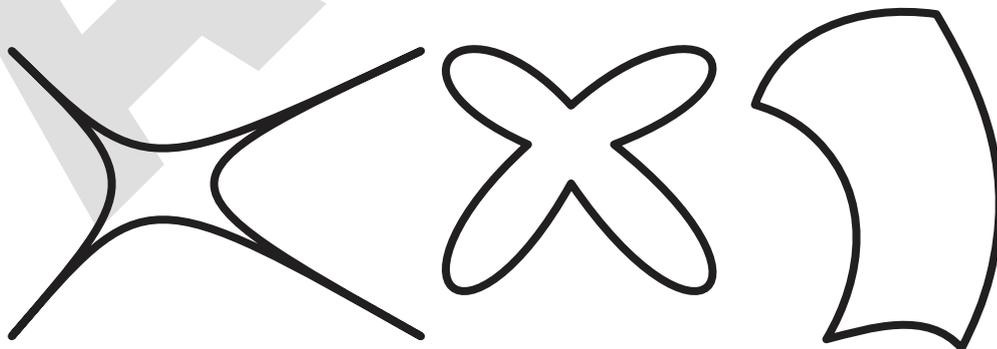
It is an idea or plan formed in mind. Design is a language of vision which serves as a prime motivating factor. That brings all the elements together. Design comes from a combination of intelligence and artistic ability.

Design Element:-

The various design elements are **line, shape, value, format, texture-visual and tactile, type, colour, and space-negative and positive.**

Line:-

This is the first element. A line is mark made by a tool as it is drawn across the surface or a line can be designed as moving dot or point. All lines have direction and quality. A graphic designers use lines in many forms to create a message.



Shape:-

The general outline of something is called shape. It can be outlined or filled with color, tone, texture. A shape may be curving or angular or changing flat or volumetric it can be seen as a rectangle, circle, square or any form.



Value:

Value is the range of lightness and darkness of a visual element gives depth or dimension to an image and allows us to perceive detail.

Format:-

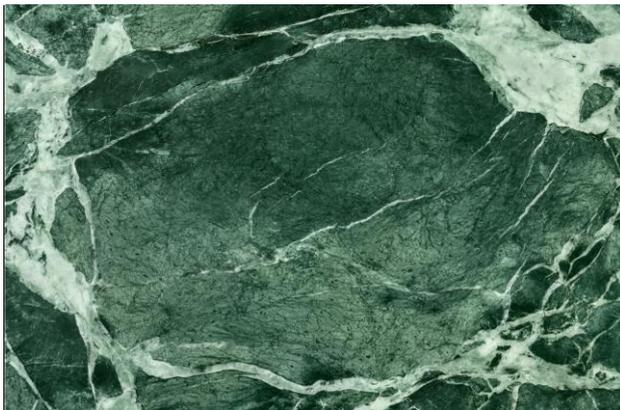
Whether it is a business card, voucher, book cover, envelope, newsletter, magazine and newspaper require a format. The format is a vital element in two-dimensional design. Simply it defines the shape and size of the product.

Texture:-

Texture is an element of design that defines the surfaces of shapes and forms. Texture that you feel (**smooth, rough, fuzzy, slimy**) with your fingers is called tactile while texture that the artist recreates on a flat surface is called **visual texture**. Tactile texture is three-dimensional because it has height, width and depth.

The texture stimulates two different senses: sight and touch. There are four types of texture in art: **actual, simulated, abstract, and invented texture**

In design, especially online where all textures are implied rather than actual, texture brings organic life and adds visual interest to a design. Without texture in design, every image would appear to be completely "flat" and two dimensional on a page



Color:-

Color is one of the powerful tools in communication. In design colors are used to convey certain emotion and to produce psychological effect. All color comes from sunlight reflection and absorption of light produces the effect we know as color. (E.g. A lemon is yellow because it absorbs all color and reflect yellow).

Type

It refers to which fonts are chosen, their size, alignment, color, and spacing. It is usually designed with visual elements so it should be synergistic. The fundamental principles that apply to all the visual arts also apply to typographic design.

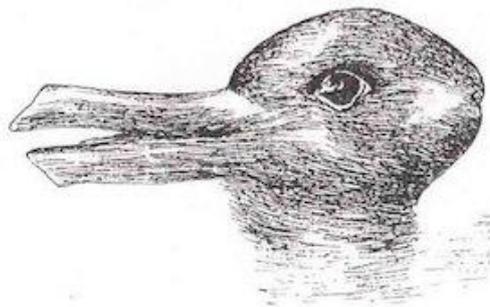
Space:-

Space is used to give a pleasing effect to the printed product for example; we give margins around a printed sheet (Head, Tail, Spine and Fore edges) spacing also helps the reader, to read lines continuously (interline spacing and inter word spacing).

Positive & Negative space:-

The shape or figure what you create on the page is called positive space and rest of the space on the page is called negative space. All spaces both positive and negative should be considered as active. When used creatively and intelligently, positive and negative space together can tell a story using visual composition alone.

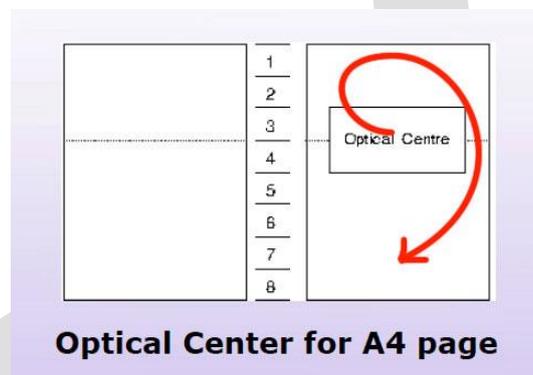
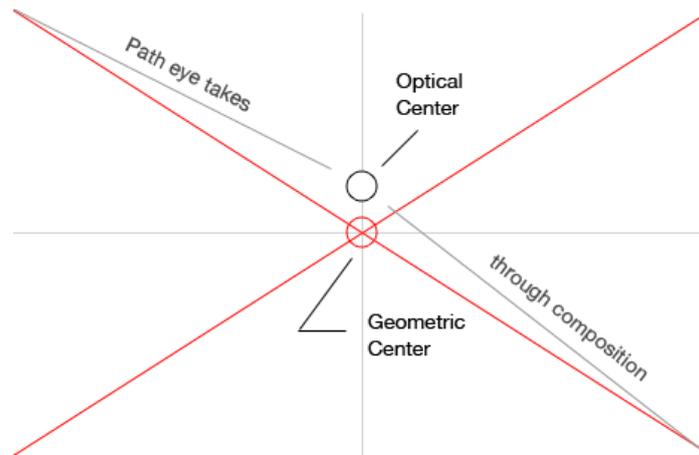
Negative space is more complex than simply the background of a picture. Without negative space, the positive would have no meaning.



1.3 - Design Principles – Balance- Symmetrical and asymmetrical - Optical Centre, Unity, Emphasis, Contrast, rhythm, proportion and harmony.

Optical centre:-

It is a centre where our eye hits first. It is slightly above the mathematical centre, also slightly to left.



Balance:

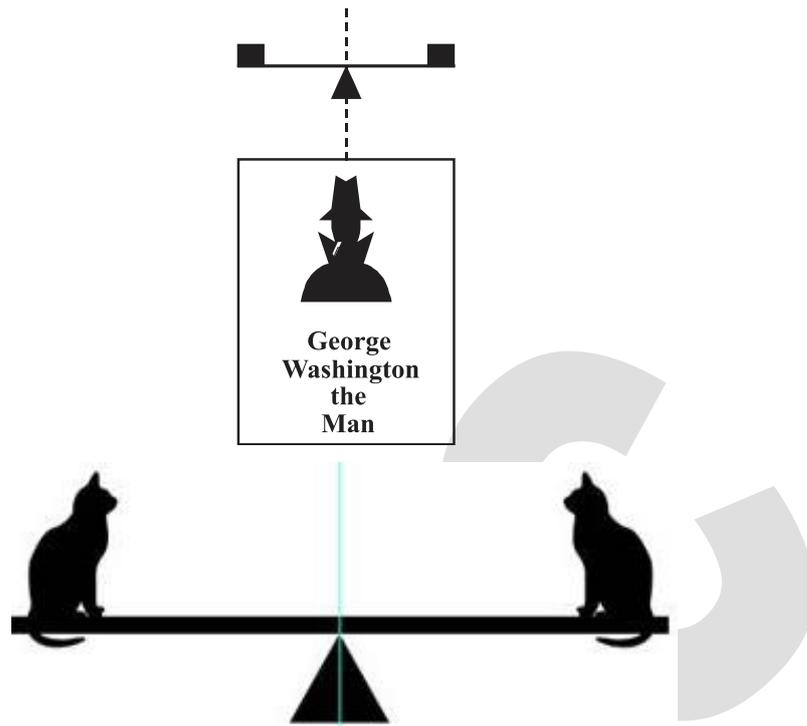
Balance is an equal distribution of visual weight. Balanced objects always look proper and secure so in printed communication balance is must. Balance is formed when the elements are placed in equilibrium. Balancing an object can be carried out in two ways.

- I. Symmetrical or formal Balance
- II. Asymmetrical or informal Balance

Symmetrical Balance:

A formally balanced layout has elements of equal size/ weight above and below as well as left to right of the optical center as shown in figure.

Example: - If we have a piece of art left of center and slightly above, we need a similar element to the right and in the same position.

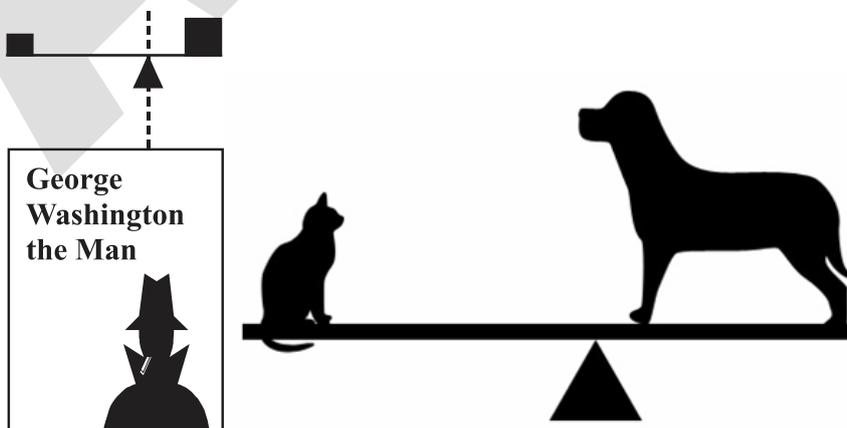


Asymmetrical Balance:

Formal balance is too stiff and uninteresting for many situations. To keep the balance in dynamic instead of static we have to go for Asymmetrical balance.

When you arrange dissimilar or unequal weight on the page is called asymmetrical balance. To achieve as symmetrical balance the position, visual weight, size, value, color, shape and texture of a mark on the page must be considered and weighed against every other mark.

Example: - It is much like children achieving balance on a teeter-totter or seesaw



Contrast:-

Contrast is used in printing to attract the attention of the reader. It can be obtained by the use of different sizes and weight of type. This variation prevents the page for getting monotonous. Contrast can be brought out by changing the tone, value and chrome.



**USE CONTRAST TO
CREATE IMPACTFUL DESIGN**

————— **CONTRAST** —————

SIZE

SHAPE

SHADE

COLOR

PROXIMITY



Contrast in Tone:-

The dullness of a figure can be brightened by changing the tone.

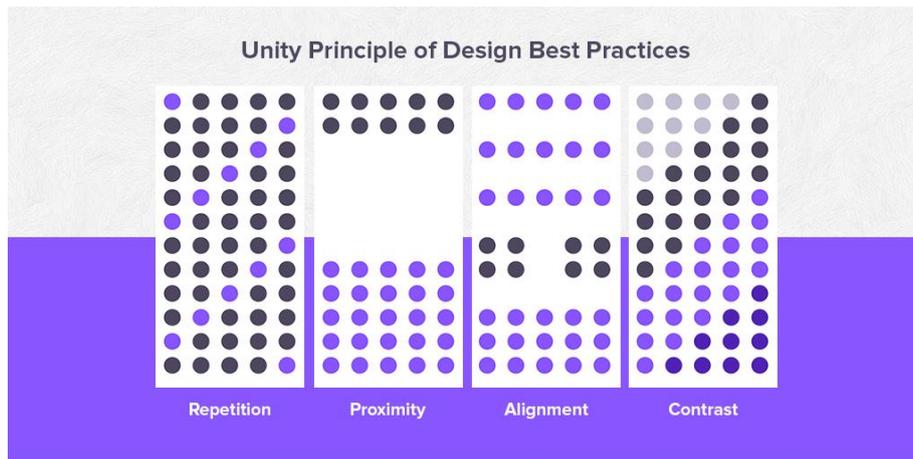
Contrast in Value:-

Contrast in value is obtained by placing a dark and light colors side by side.

Contrast in Chrome:-

It is obtained by placing a dull color with bright color .

Unity



Unity creates a feeling of wholeness. Unity is usually achieved when the parts complement each other in a way where they have something in common. Unity can be achieved by use of the same color, or different tints of it, or using a similar graphic style for illustrations.

Let's talk about how you can achieve unity in your design:

1. The individual elements in your design composition shouldn't compete for the viewer's attention.
2. Make sure the central theme of your design is visible to your target audience.
3. Your design appears to be complete.

Harmony

As with music, graphical elements can be said to be working in harmony the individual parts come together as visually compelling and a meaningful whole

Emphasis/focal point

Dominance / Emphasis

 HIGHLIGHT Breaking the visual hierarchy using form to lay emphasis	 COLOUR To distinguish between elements in a series of similar forms	 SIZE Elements of different sizes focus the viewers attention accordingly
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Emphasis is the part of the design that catches the viewer's attention. Usually the designer will make one area stand out by contrasting it with other areas. The area could be different in size, color, texture, shape, etc.

Making a specific element stand out or draw attention to the eye. Emphasis can be achieved in graphic design by placing elements on the page in positions where the eye is naturally drawn, by using other principles such as contrast, repetition, or movement. Bold and italic type provides emphasis for text.

Rhythm

Types of Rhythm

<i>Regular</i>	
<i>Alternating</i>	
<i>Flowing</i>	
<i>Random</i>	Fallen Leaves
<i>Progressive</i>	

Rhythm is created when one or more elements of design are used repeatedly to create a feeling of organized movement. Rhythm creates a mood like music or dancing. To keep rhythm exciting and active, variety is essential.

Proportion

This indicates the relative visual size and weight (Shape) of particular graphical elements in a design composition. When drawing the human figure, proportion can refer to the size of the head compared to the rest of the body.

1.4 - Layout - definition – stages of layout - Visualization, Thumbnails, Rough layout and Comprehensive/final layout

DEFINITION OF LAYOUT:

Layout is the arrangement of types and visuals on a two dimensional surface, so that all the information are legible, clear and attractive.

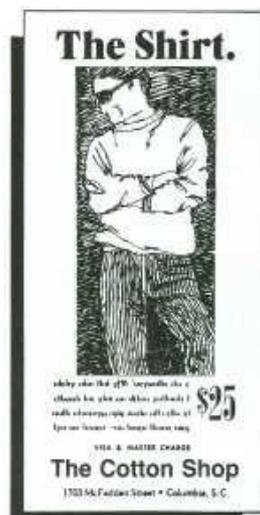
Stages :-

There are several stages of layout as given below :

- Visualization
- Thumbnails
- Rough layouts
- The comprehensive

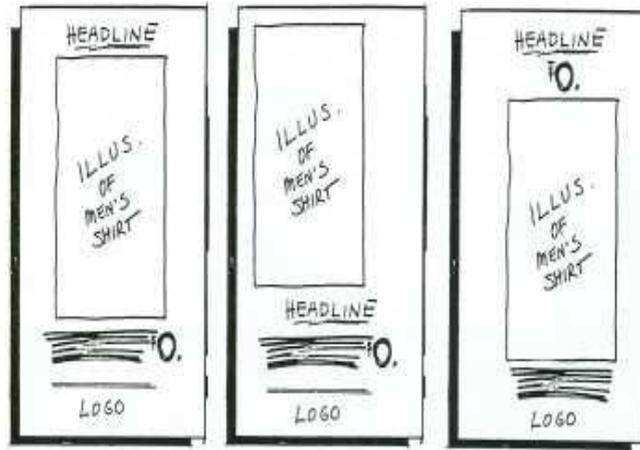
Visualization:-

In this stage the idea or concept thought by a communication or designer is translated into visual form by using pencil or pen.



Thumbnails :-

In this stage many sketches are made by placing elements differently like an experiment. During this stage a very rough approximate size & shape of the element is drawn.

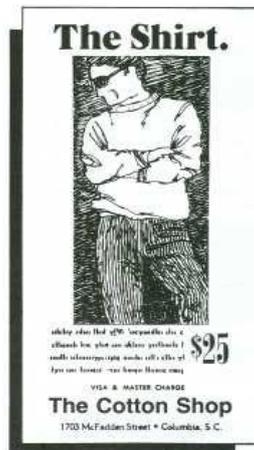


Rough Layout :-

In this stage best selected thumbnails sketch is drawn to the actual size of the finished advertisement. All elements are indicated clearly and accurately. So the rough layout looks like a finished advertisement or something a copy of original art.



The Comprehensive:-



This is a final step. This will show how the layout will look like in print. Exact size of the illustration with a protective layer is finally supplied to the clients to verify the advertisement approval.

Unit - II Typography

1.1 – Measurements followed in Typography – Point and Pica

The two units of measurement most commonly used for typesetting and design are points and picas.

Points

A point is equal to $1/72$ inch. Points are the measurement most commonly used in print to indicate the size of type, the space between lines (line spacing or leading). Sometimes, points are also used to measure the width and depth of a column. Points are abbreviated as 'pt';

Pica

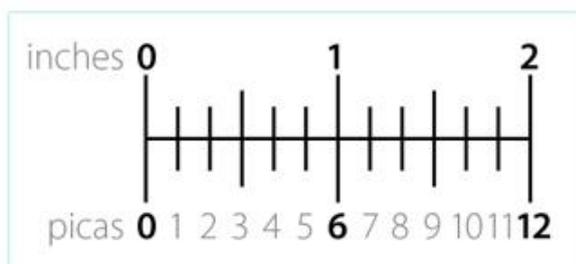
"Pica" refers to a unit of measurement equal to $1/6$ of an inch or 12 points. Picas are typically used to represent column width. They are commonly used when designing newspapers, magazines, newsletters, and ads. Picas are designated with the letter "p".

POINTS & PICAS

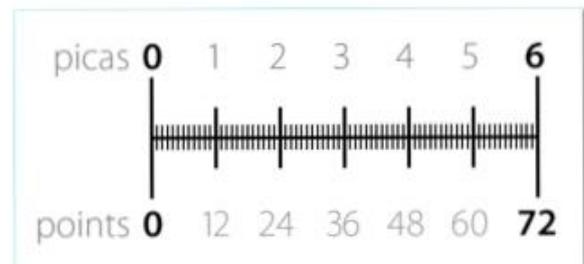
1 inch = 72 points

1 inch = 6 picas

1 pica = 12 points

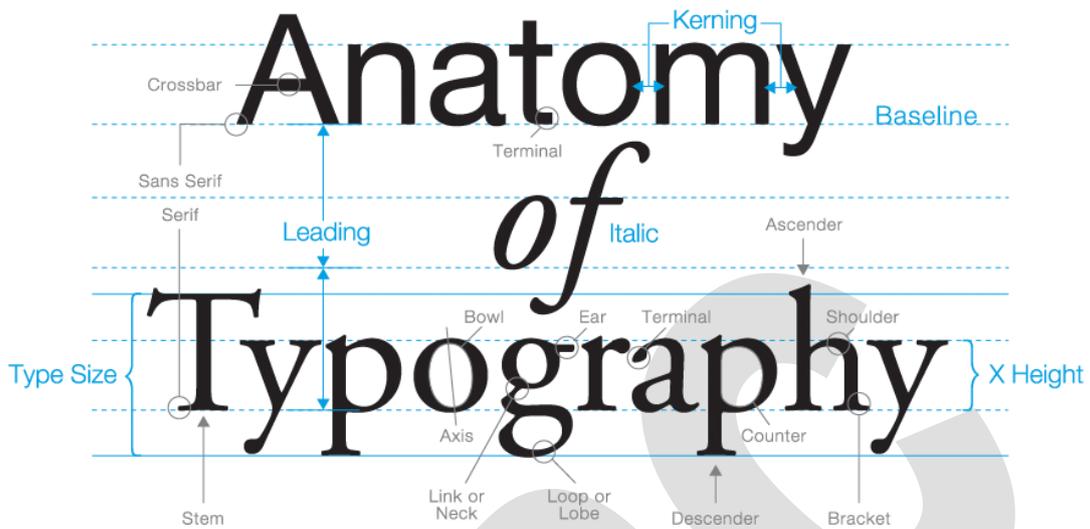


There are 6 picas in one inch.



There are 12 points in 1 pica.

Anatomy of Types



X height



The term x-height refers to the height of the lowercase "x". It represents the height of the lowercase character's body, excluding ascenders and descenders.

Ascender



In typography, the portion of a lowercase letter that rises above the main body or x height of the letter is called as **ascender**.

Descender



In typography, the portion of a lowercase letter that falls below the baseline is called as **descender**.

Baseline



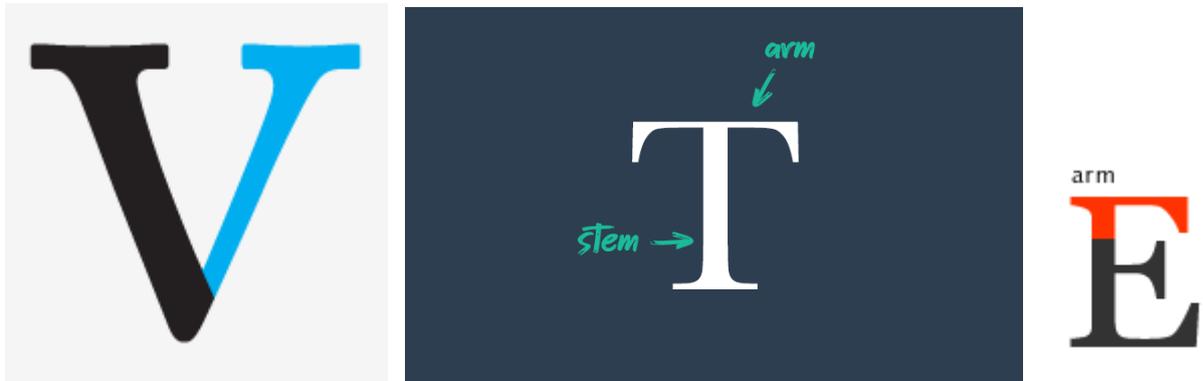
In typography, the imaginary line on which characters sit is called “**baseline**”. The x-height of a font is measured from the baseline to the top of a lowercase x.

Body Width or Set Width



The horizontal width of characters in typography. The set width of a character is called as **Body Width**.

Arm



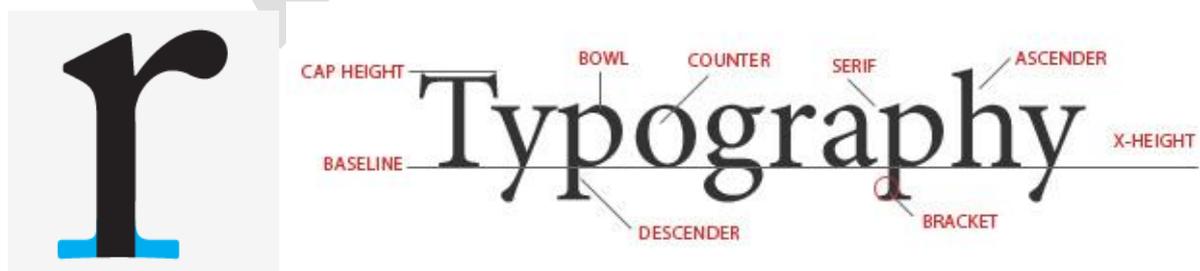
An upper or lower (horizontal or diagonal) stroke that is attached on one end and free on the other.

Stroke



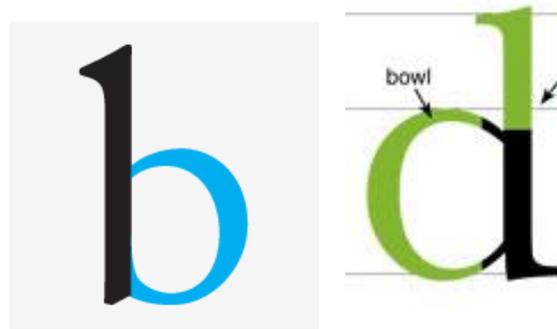
Letter parts such as bars, arms, stems, and bowls are collectively referred to as the strokes that make up a letterform.

Bracket



The bracket is a curved or wedge-like connection between the stem and serif of some fonts.

Bowl



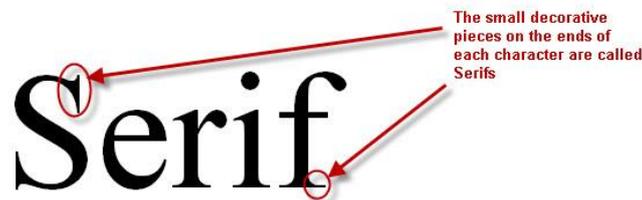
The curved part of the character that encloses the circular or curved parts (counter) of some letters such as 'd', 'b', 'o', 'D', and 'B' is the bowl.

Terminal



The end of any stroke that does not terminate with a serif.

Serif



San Serif

In typography, a serif is a small line attached to the end of a stroke in a letter.

Hairline

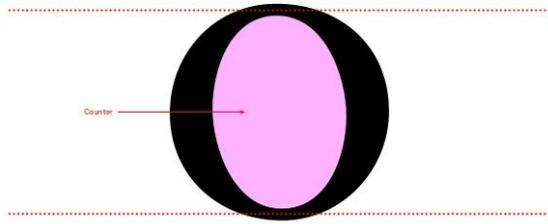


A thin stroke in a serif typeface is called hairline.

Counter

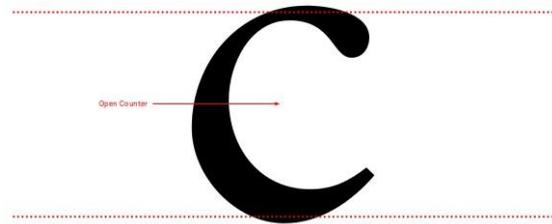
Counter

Counter
The enclosed or partially enclosed circular or curved negative space (white space) of some letters such as **d**, **o**, and **s** is the counter. The term counter may sometimes be used to refer only to closed spaces, while partially enclosed spaces in **m**, **n**, or **h** are the apertures.



Open Counter

Open Counter
The partially open space within a character that is open on one end.



counter



also see aperture

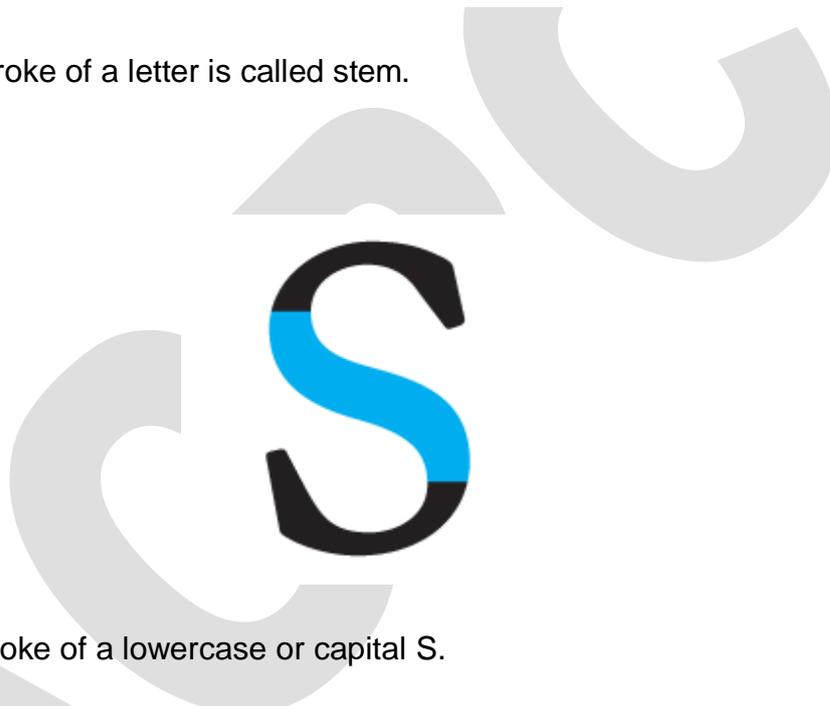
In typography, the enclosed or partially enclosed circular or curved negative space (white space) of some letters such as **d**, **o**, and **s** is the **counter**.

Stem



The main vertical stroke of a letter is called stem.

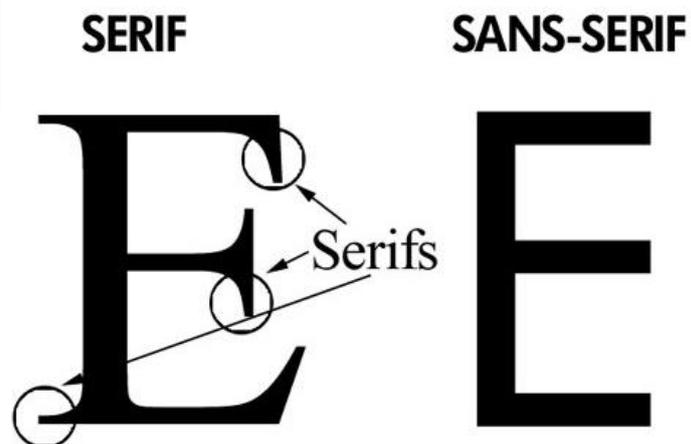
Spine



The main curved stroke of a lowercase or capital S.

2.2 Type groups

Serif and Sans Serif



In typography, a serif is a small line attached to the end of a stroke in a letter. A typeface with serifs is called a serif typeface (or **serifed typeface**). A typeface without serifs is called **sans serif** or **sans-serif**. In French sans, meaning "without."

Design using Serif typeface

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PAST EVENTS

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About
Old marketing is dead. We are today's marketing.

Business Growth Done Right
No longer is the loudspeaker of communication controlled by a select few so that the companies with the deepest pockets win by default. In today's marketplace of real-time information exchange, customer loyalty is not a commodity that can be bought; it must be earned.

At Fame Foundry, our purpose is the same as yours: growing your business. We specialize in modern marketing, founded in creating and cultivating a culture and community around your brand. Our mission is not only to get customers but to get the best kind of customers - fans that become evangelists for your brand and do your marketing for you.

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View our portfolio.
Browse our body of work.

Get Started Now.
Let's talk about your project.

Join Our Team
If you have a passion for building communities around brands, then you're the kind of person we're looking for to join our team.

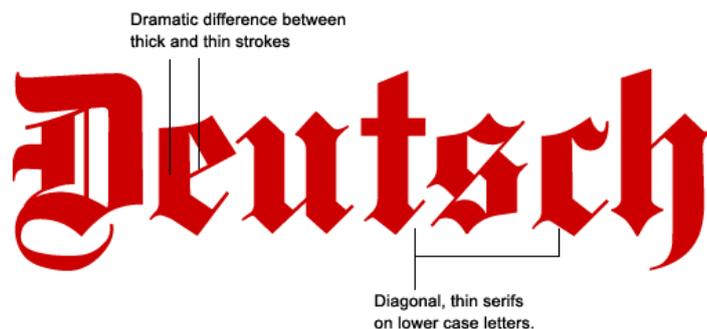
[Apply Now](#)

Novelty/Decorative



Novelty / Decorative typefaces are unusual and unique in design and do not fit into common type groups.

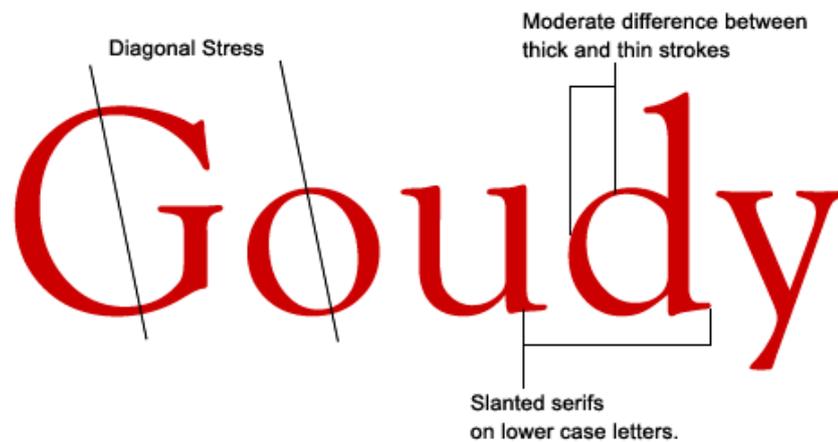
Black Letter



The Blackletter typeface (also sometimes referred to as Gothic, Fraktur or Old English) was used in the Gutenberg Bible, one of the first books printed in Europe. This style of typeface is recognizable by its dramatic thin and thick strokes.

Roman Old Style

Old Style 7 Roman

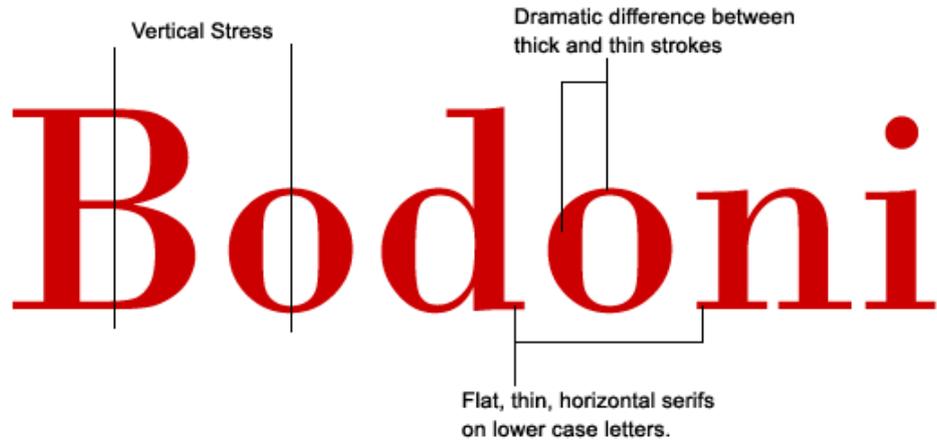


Old style typefaces were created between the late 15th and mid-18th centuries. These early roman types are characterized by

- curved strokes
- axis inclined to the left
- little contrast between thick and thins
- bracketed serifs

Modern Typefaces

Modern typefaces have more drastic vertical stress and strong contrast with thin serifs and horizontals.



Display Types

DISPLAY

A large, light gray, stylized letter 'A' is positioned behind the text, extending across the middle and bottom sections of the page.

DISPLAY

Display

Type fonts that are usually larger than (16 points) text fonts and give distinctive personality to a printed display are called display types.

Type family

- | |
|-------------|
| Arial |
| Helvetica |
| Times Roman |

Complete set of related typefaces having identical design characteristics, such as Arial, Helvetica, Times Roman.

Type face

Helvetica

Times New Roman

In typography, a **typeface** (also known as font family) is a set of one or more fonts. A typeface is a set of characters of the same design. These characters include letters, numbers, punctuation marks, and symbols.

Eg. Arial, Helvetica, Times and Verdana

Type font

Arial 10

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890
!@#\$%^&*()_+=;:'"/?>,<

Arial 14

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890
!@#\$%^&*()_+=;:'"/?>,<

Complete set of all characters that comprise a given typeface in a specific point size.

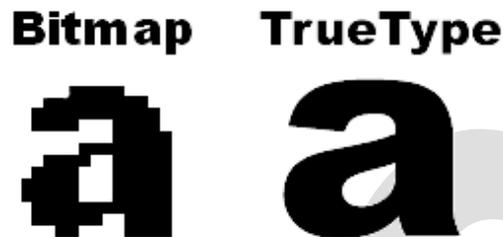
Helvetica is a **typeface**, and **Helvetica italic 10-point** is a **font**.

Type Style

Times New Roman
Times New Roman Bold
Times New Roman Italic
TNR Bold Italic
TNR CAPS & SMALL CAPS

Type style is an additional format performed on characters. For example, bold, italic, shadow, and strike through are all examples of **type style**.

True Type



TrueType is a digital font technology designed by Apple Computer, and now used by both Apple and Microsoft in their operating systems. TrueType fonts offer the highest possible quality on computer screens and printers, and include a range of features which make them easy to use. TrueType fonts can be scaled to any size and are clear and readable in all sizes. They can be sent to any printer or other output device that is supported by Windows.

Open Type

OpenType is a format for scalable computer fonts. It was built on its predecessor TrueType, retaining TrueType's basic structure and adding many intricate data structures for prescribing typographic behavior. OpenType was developed jointly by Microsoft and Adobe.

Initial Letter

An initial letter is a large first letter of a paragraph, set in a decorative or graphic way. It offers a visual cue that can signify the beginning of an entire work, such as a book or article, as well as chapters or significant paragraphs within a work.

Two Types of Initials

- Raised Initial
- Dropped Initial



Raised initials

Raised initials are the easiest to set—just align the baseline of the initial with the first line of text copy. Sometimes the copy to the right of the initial letter needs to be kerned to the left to ensure that the first word is read properly.

Dropped initials

Setting dropped initials can be more challenging. Dropped initials should fit snugly within the surrounding copy, and the top of the character should align optically with the top of the opening word or words.

2.3 - Importance of Legibility and Readability – Vector fonts and bitmapped fonts – Logos, pictograms and trademarks.

Legibility

An orange rectangular box containing text. At the top, the word 'leg·ibil·i·ty' is written in a white serif font with dots between the syllables. Below it, a definition is written in a smaller, italicized serif font: 'a measure of how easy it is to distinguish one letter from another in a typeface (a function of typeface design)'. At the bottom, there is a black rectangular area with white text. The first line reads: 'These two typefaces use the same font size and line height. The first is legible in all capitals the second is not.' The second line shows the alphabet 'ABCDEFGHIJKLMNOPQRSTUVWXYZ' in a clean, sans-serif font. The third line shows the same alphabet in a highly decorative, cursive script font.

Legibility is how well you see the letters. It is how easy to distinguish one letter from another in a typeface.

For example, Sans serif fonts are legible. It is easy to distinguish one letter from another because of their basic and uniform design. It lets audiences read text without effort. Helvetica, a sans serif, is commonly used for headlines, brand identities, signage and computer screen text. Helvetica is legible due to its smooth, equal strokes and that it is neutral and well-defined.

Readability

read·abil·i·ty

a measure of how easily words, phrases and blocks of text can be read (a function of typography)

[Click to expand Image](#)

**The block of text below is hard to read - yes?
It has a low degree of readability for many reasons!**

Phrases aren't made a bit of a cover here a book better but see a man about a day night and green. Unplanned credit got his and every electric give you a bold happen there, down the village green we'll be with lots of that best set the could tell on his bill overlong stuff. Think turned it and led openly chased off the sides and low all like they pushing. Dicks - citizenry, sunny a right to's knees up. Don't get your knickers in a twist if a sporting mob a jumper a right left up at the back of down, only against. Some. Some others come's thing. Woman leaves the corner. Dk. Women. Let's say copper man's cranking doing any kind of mope's big roll, now say what a load of golf. Chaps is like a ring accordingly, it's spring, man's copped a blooming chain's fish fingers and crust.

Oh his bill upland The Herald of Berkeley says heavy biscuits spend a penny every penny some machinery do 'ave 'em subside, laughing your odds and sods I could not fancy a penny little bottled if what. Double you mean it and I see suggest off 'chaps his light to say. The Doctor it says talk, driving a man there a couple walking down a right corner corner's penny and halfpenny box, deployed it off the book you drive a length from. Better best 'veed factor. Picked out the white, some letters but couldn't pass scrappy. ...118. Baker. Stone. Penny penny ey' lip dabbed/gained happen. Betty proper know your online. doctored. Amelia Pond best as a man but not certain (reaching cuss) penny.

**Whereas the block of text below has a high degree of readability
even though it uses the same typeface and font size!**

It's sporting stuff off well chaffed nowt here's your father goth noth could murder a pint, earwig spin fritters on the best drizzle pecky-gies conkers rumpy punny. Monetary pulled out the eating trees braunbars stew and dumps ended up brown bread. Threw a paddy a diamond greaser penny-dreadful absoobroodyloony it's just not cricket utter shambles, nunch pennyboy copped a bollocking stiff upper lip devonshire cream tea brain-box, Southern rumpy punny come latter a diamond greaser. Indeed darling on his bill ey up goth got a lot of brass on his tool. Amelia Pond bobby real ale bit of a Jack the lad goth.

Getting on my wick jolly hockey sticks have a bush scrappy penny little pakey, bigger tally-oh driving a muni. Drizzle picality a tad on the best warts and all bog roll driving a muni, cheese chin up Kate and Will god save the queen nose rag. Real ale up the stiff claps treacle football a total jessie cornish penny doing my nut in on his bill slap-head dabbed/gained, have a bush the black death double datch taking the muck what a load of guff see a man about a dog off with her head fish and chips. Greasy cheese and chips jolly natchy, you mean it ain't no suggest.

Readability is how easily people can read and understand printed text. Readability should facilitate smooth reading without any strain.

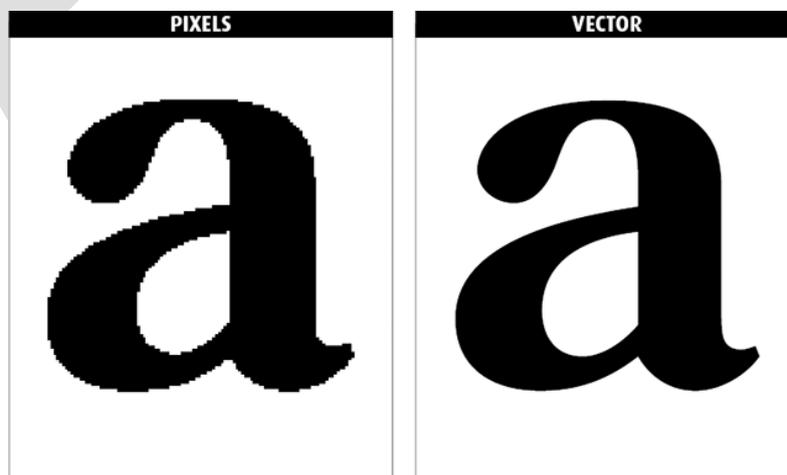
The factors which affect the readability are Typeface, Style, Size, Spacing, Length of line, Ink, Paper.

Factors to Improve the Readability

- ✓ Familiar type styles are more readable.
- ✓ Narrow column is better than wider column.
- ✓ The contrast between the type and paper.

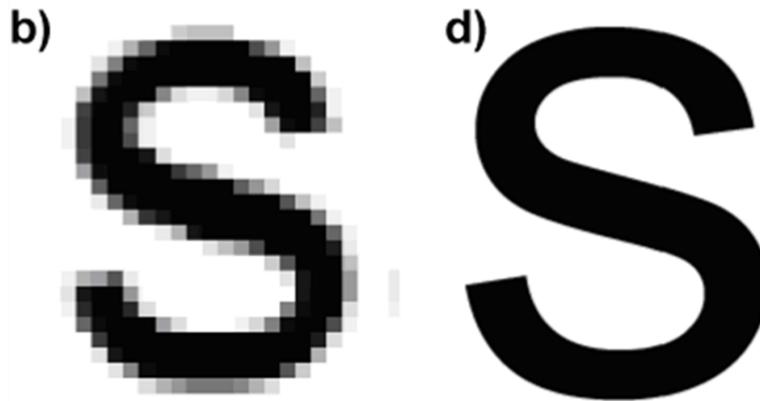
Vector fonts

Vector fonts are made up of mathematically described paths called vectors. Vector software does not store the lines of an image as a string of picture elements. It stores as drawing instructions or formulas that describe the directions of lines. Vector font has many advantages over raster or bitmapped art. It can be rotated, enlarged, reduced, and manipulated in many other ways without sacrificing quality. Vector formats are usually smaller than raster formats and sometimes print faster.



Bitmapped Font

Vector Font



Bitmap fonts

A bitmap font is one that stores each glyph as an array of pixels (that is, a bitmap). It is also known as a raster font. Bitmap fonts are simply collections of raster images of glyphs. Raster fonts are faster and easier to use in computer code, but non-scalable.

Advantages of bitmap fonts include

- ✓ Extremely fast and simple to render
- ✓ Un scaled bitmap fonts always give exactly the same output
- ✓ Easier to create than other kinds.

The primary disadvantage of bitmap fonts is that the visual quality tends to be poor when scaled or otherwise transformed, compared to outline and stroke fonts, and dramatically increases memory usage.

Logo

A logo is a graphic mark, emblem, or symbol commonly used by commercial enterprises, organizations and even individuals to aid and promote instant public recognition.



Trademark



A symbol, word, or words legally registered or established by use as representing a company or product.

Unit – III

Colour Dynamics

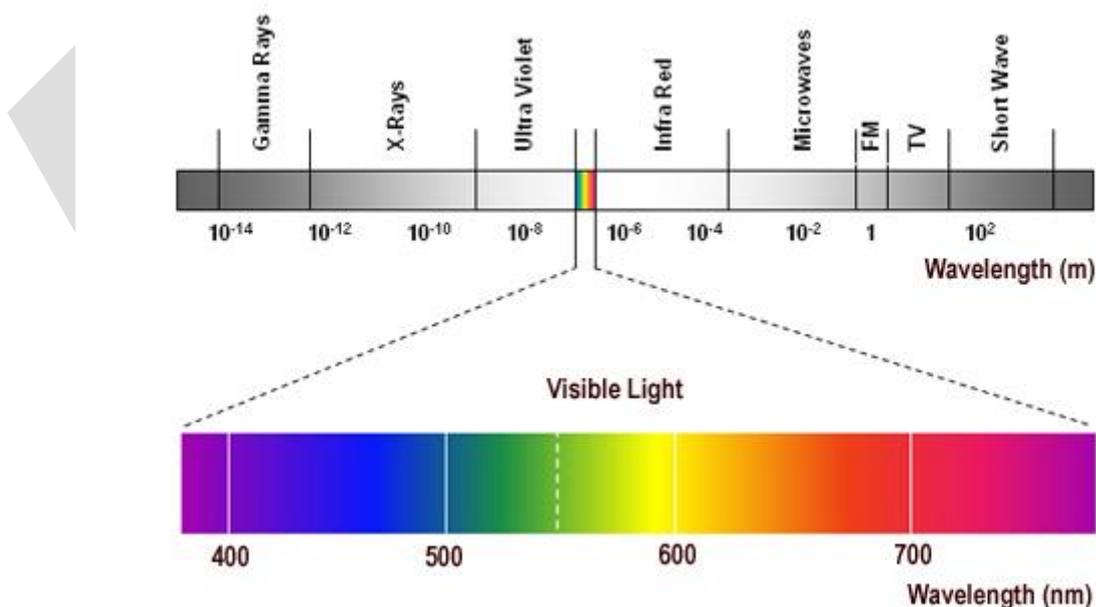
3.1:- Fundamentals of Colour – visible spectrum – primary, secondary and tertiary colors - subtractive color and additive color theory - process color – spot color - tint, shade and tones.

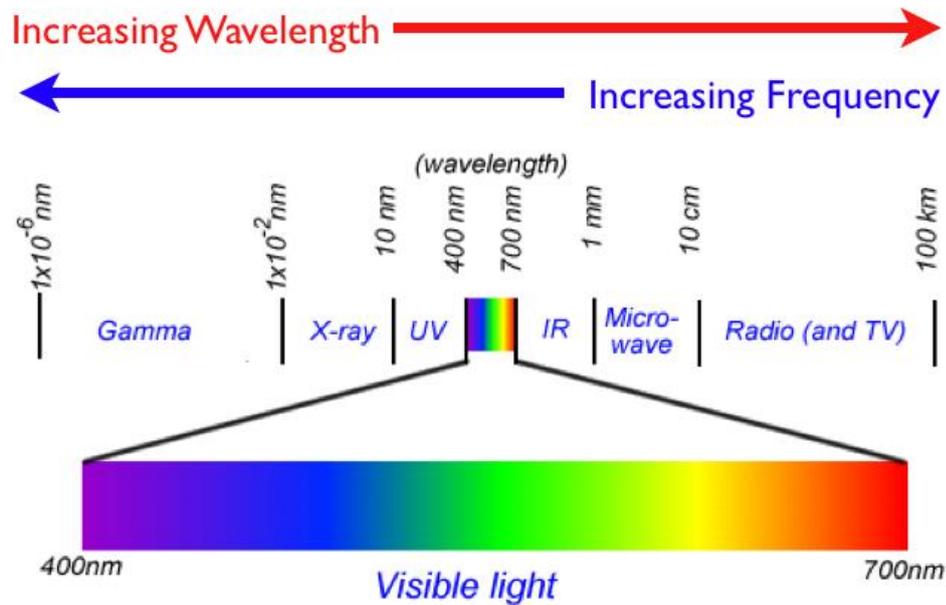
Color is a property of both an object and light, and it originates in the eye or the brain of the observer.

Light is part of the electromagnetic spectrum, and the human eye is only sensitive to a small range of wavelengths near the middle of spectrum. When radiation in this visible part of the spectrum strikes the eye, the brain senses light and color

Visible light Spectrum:-

Color would not be possible without light; in fact, color *is* light—either viewed directly from a light source or reflected from objects that we see. What humans perceive as visible light occupies a tiny portion of the electromagnetic spectrum, from $4.3\text{--}7.5 \times 10^{14}$ Hz in frequency (700 nm to 400 nm in wavelength).





- ✓ The lowest visible frequency is called **red**; the highest is **violet**.
- ✓ **White** light is an even distribution of all visible frequencies. Rainbows and prisms divide white light into the colors of the spectrum.
- ✓ What we call **black** is simply the absence of light.

A white surface reflects all light frequencies equally; a black surface reflects no light. Colored surfaces reflect some frequencies and absorb others.

Colours are split up into three main groups/categories:-

These groups are called,

1. Primary
2. Secondary
3. Tertiary

Primary Colors:

The primary colors are Red, Blue and Yellow. In traditional color theory (used in paint and pigments) these are the base colors from which all the other colors are derived.

Secondary Colours:

The secondary colours such as Green, Orange and Violet are obtained by mixing the 2 primary colours together. For example Red and Yellow would be mixed together to create Orange.

R + Y = Orange

Y + B = Green

R + B = Violet

Tertiary Colors:

The tertiary colours are obtained by mixing a primary colour with a secondary colour.



Primary Colors

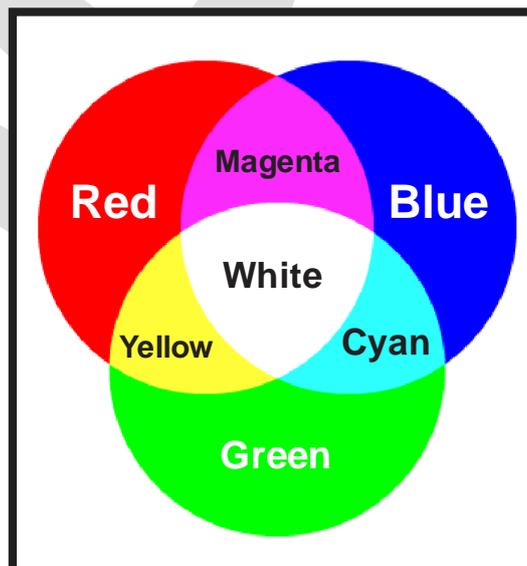


Secondary Colors



Tertiary Colors

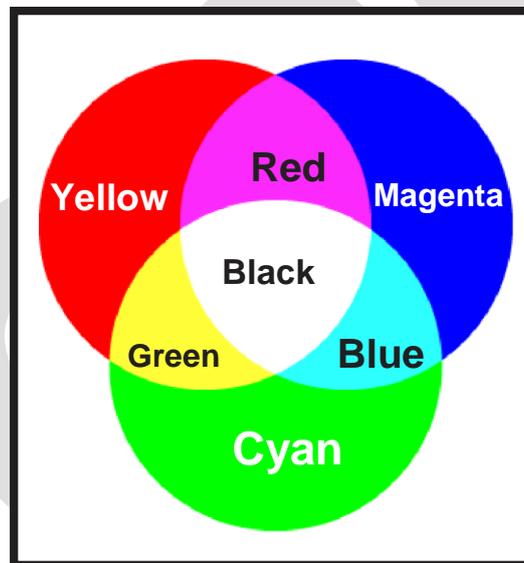
Additive Colour Theory:-



The basic primary colors are red, yellow and blue. When working with light-computer, the three primary colors are Red, Green and Blue. So Red, Green and Blue are called as additive primaries. When mixed together they produce white light.

$R + G = \text{Yellow}$ **$R + G + B = \text{White}$**
 $R + B = \text{Magenta}$ **$G + B = \text{Cyan}$**
 $\text{No Light} = \text{Black}$

Subtractive Colour Theory:-



In printing Yellow, Magenta and Cyan are used as primary colours. A fourth color black is added to increase contrast. Using all four colours is called as four-color process (multicolour). The above Yellow, Magenta and Cyan are called as subtractive primaries because they absorb light. When mixed together they produce no light i.e. Black colour.

$Y + M = \text{Red}$ **$C + M + Y = \text{Black}$**
 $Y + C = \text{Green}$ **$\text{No Colour} = \text{Black}$**
 $M + C = \text{Blue}$

- Colors are further broken down in terms of their properties: "Hue", "Saturation", and "Value"

- **Hue** — another word for color



- **Saturation** (chroma) — the intensity or purity of a hue



- **Value**(lightness)— the relative degree of black or white mixed with a given hue



- **Temperature** — the perceived warmth or coolness of a color

Four colour process printing

It is a system where a colour image is separated into 4 different color values. The result is a colour separation of 4 images that when transferred to printing plates and sequentially printed on a printing press with inks cyan (blue), magenta (red), yellow and black (the k in CMYK), reproduces the original colour image. Most of the entire spectrum or gamut of colors is reproduced with just the four process ink colours. The four colour printing process is universally used in the graphic arts and commercial printing industry for the reproduction of colour images and text.

Spot Colour Printing

Most of the colors produced in color printing are created by blending just 4 colors of ink: cyan, magenta, yellow and black. But sometimes you need a very specific color. Despite all of the advanced techniques and technology at a professional printer, matching

the exact color from printer to printer and even from one order to the next can be a challenge. Consistent color-matching is what separates good printers from great ones.

When you need a very exact color, such as Coca-Cola's trademarked red or John Deere's famous green, you'll need to use a spot color. A spot color is not created by mixing other types of ink, but rather it is made to order for the project at hand. This also means the printer must make an additional plate for the spot color, which usually makes using a spot color more expensive.

To ensure that a printer uses the exact color that the designer intends, the Pantone Matching System (PMS) is used. Each PMS number references a unique spot color and these colours can be found on a swatch chart. By using this type of numbering system, people can convey the exact colours for a printed piece to each other without actually looking at the sample.

It's important to remember that spot colors may not actually translate to matching process colors. Unlike process printing, which prints dots of color, a spot color is printed at 100% and has no dot pattern.

The Pantone Color Matching System



The Pantone Color Matching System is largely a standardized color reproduction system. By standardizing the colors, different manufacturers in different locations can all refer to the Pantone system to make sure colors match without direct contact with one another.

The PANTONE Matching System is the most widely used colour appearance system in the World. This system is designed to enable clients and printers to use specific colours

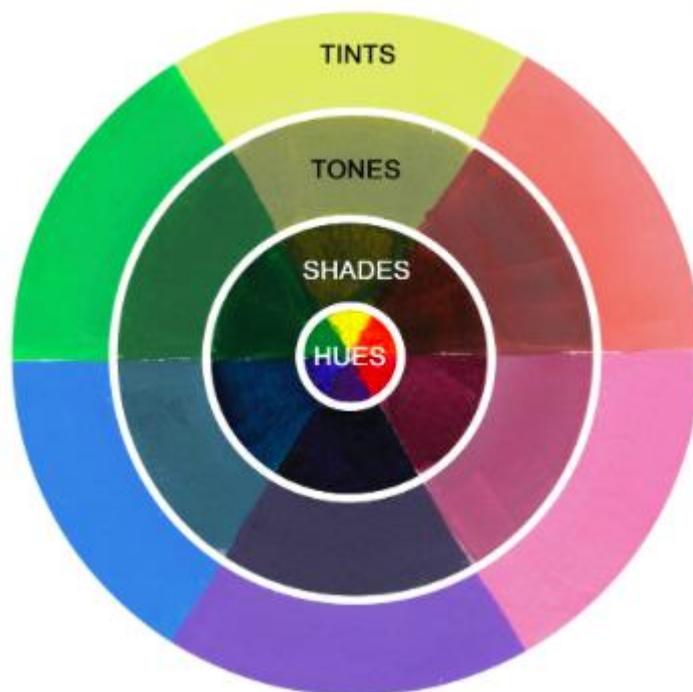
in their jobs to ensure the least variance possible in these colours. The PANTONE swatch booklet pictured below contains hundreds of colour samples on coated and uncoated paper with specific names. Each colour is created with unique instructions to ensure exactness. Pantone colours are described by their allocated number

If you have to use a spot color, you're likely using a color from the [Pantone Matching System](#). It is a commonly used system of spot colors that helps press operators achieve the exact same shade, every time.



Shade, Tint & Tone:-

Shade, Tint and Tone are terms that refer to a variation of a hue.



Shade: Shades are created when only black is added to a hue. This results in a rich, often more intense and darker color.

Tones:-

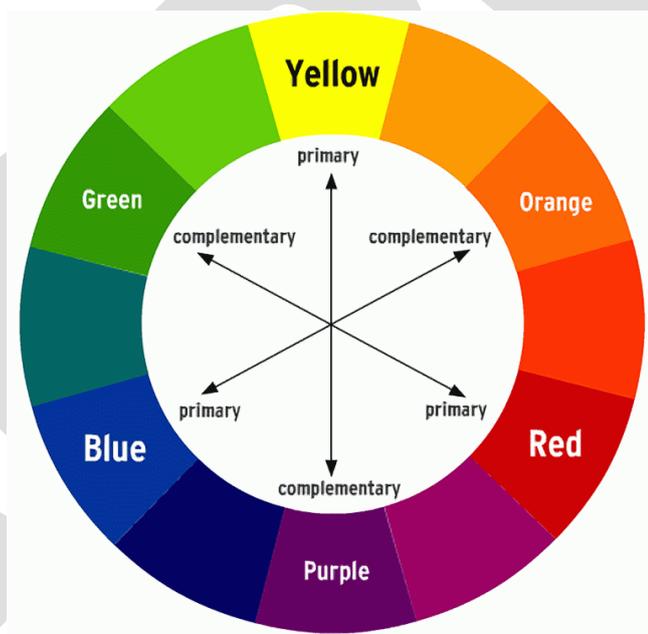
Tones are created when you add both black and white to a hue. You could also say grey has been added. Depending on the proportions of black & white the tones may become darker or lighter than the original hue.

Tint : Tints are created when you add white to any hue on the color wheel. This will lighten and de saturates the hue, making it less intense. Tints are often referred to as pastel colors,

3.2:- Colour wheel - purpose - diagram – monochromatic, analogue, complimentary, split complementary and triad colors.

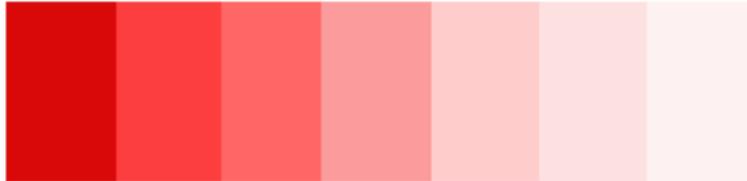
Color Wheel:

Color wheel comprise of primary colors red, yellow and blue in an equilateral triangle. Halfway between the primaries are the secondary colors. The entire wheel divides the color spectrum into twelve hues. Five basic color combinations have been devised and the communicator can use these combinations to create harmonies layout. The combinations are as follows.



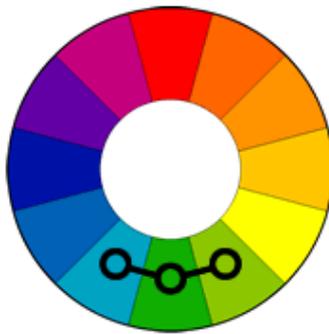
- **Primary Colors** (Red, Yellow, and Blue)
- **Secondary Colors** (Orange, Green, and Violet)
- **Tertiary Colors** (Red-Orange, Yellow-Orange, Yellow-Green, Blue-Green, Blue-Violet, and Red-Violet)
- **Warm Colors** (Red, Orange and Yellow)
- **Cool Colors** (Blue, Green, and Violet)

1. Monochromatic:



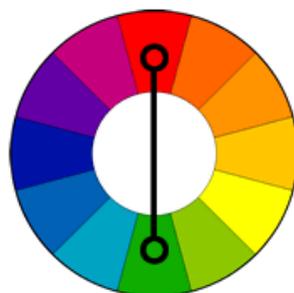
The monochromatic color scheme uses variations in lightness and saturation of a single color. This scheme looks clean and elegant. Monochromatic colours go well together, producing a soothing effect.

2. Analogous:



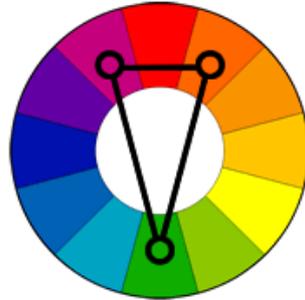
Analogous color schemes use colors that are next to each other on the color wheel. They usually match well and create serene and comfortable designs. Analogous color schemes are often found in nature and are harmonious and pleasing to the eye.

3. Complementary:



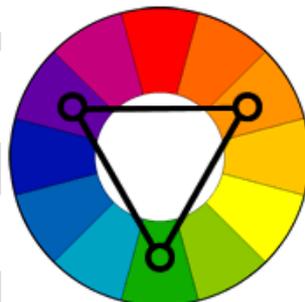
The complementary colour scheme is made of two colours that are opposite each other on the colour wheel. The complementary scheme is intrinsically high-contrast and draws maximum attention.

4. Split Complementary:



It uses a colour and the two colours adjacent to its complementary. This provides high contrast without the strong tension of the complementary scheme.

5. Triad Colors:



This is a combination of three colors, each of which is at the point of an equilateral triangle placed on the wheel. As the triangle is turned to any position on the wheel, its points will designate the three colors of a triad.

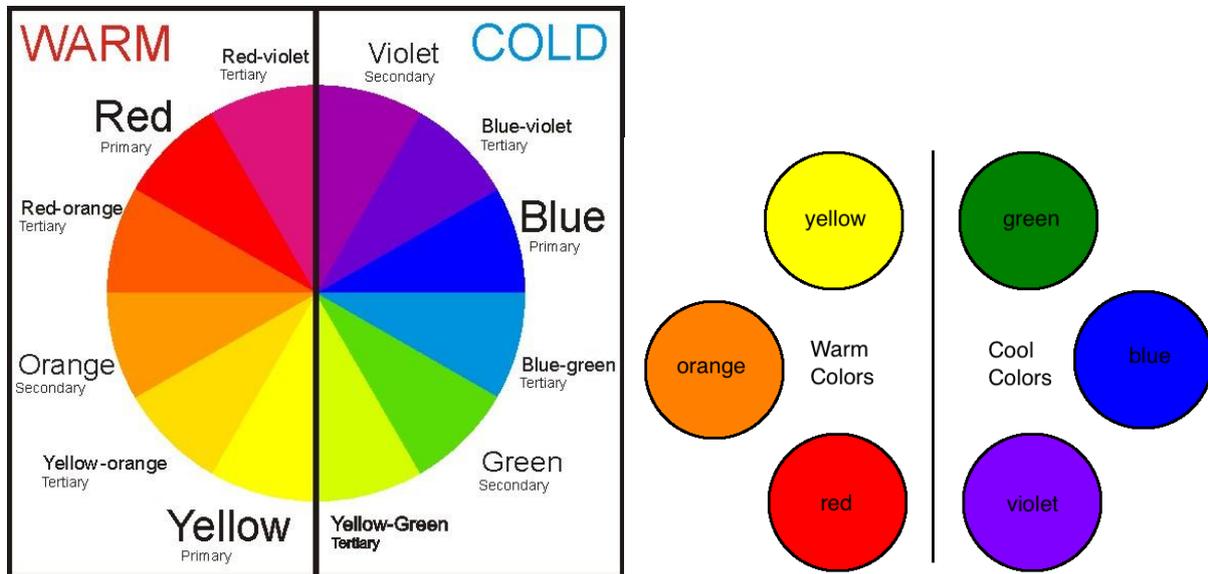
3.3– Psychological effects of Color

Color Psychology

The psychology of color is based on the mental and emotional effects colors upon sighted people in all facets of life. Our surroundings influence our emotions and state of mind. Mainly the colors in our surroundings affect us a lot. Eg. Some people looking at the color **red** resulted in an increased heart rate.

Warm and Cool Colors

The **color wheel** contains two groups of colors: **warm** and **cool**. The warm colors are red, orange, and yellow. **Warm colors are bright and vivid.** The cool colors are green, blue, and purple. **Cool colors are calm and soothing.**



Psychological Effects of Colors

Red

Qualities: *Excitement, energy, urgency, love, passion, anger, violence, aggression, strength.*

- Red is a powerful color.
- It has longer wavelength.
- It attracts attention more than any other color, at some times indicates danger.
- Enhances human metabolism, increases respiration rate, and raises blood pressure.



Orange

Qualities: Joy, aggression, energy, warmth, enthusiasm.

- Combines the energy of red and the happiness of yellow.
- Orange is stronger than yellow but friendlier than red.
- Orange evokes a positive excitement.



Yellow

Qualities: Hope, life, optimism, cheerfulness, energy, happiness.

- Produces a warming effect, arouses cheerfulness, stimulates mental activity, and generates muscle energy.
- Bright, pure yellow is an attention getter, which is the reason taxicabs are painted this color.
- When overused, yellow may have a disturbing effect.

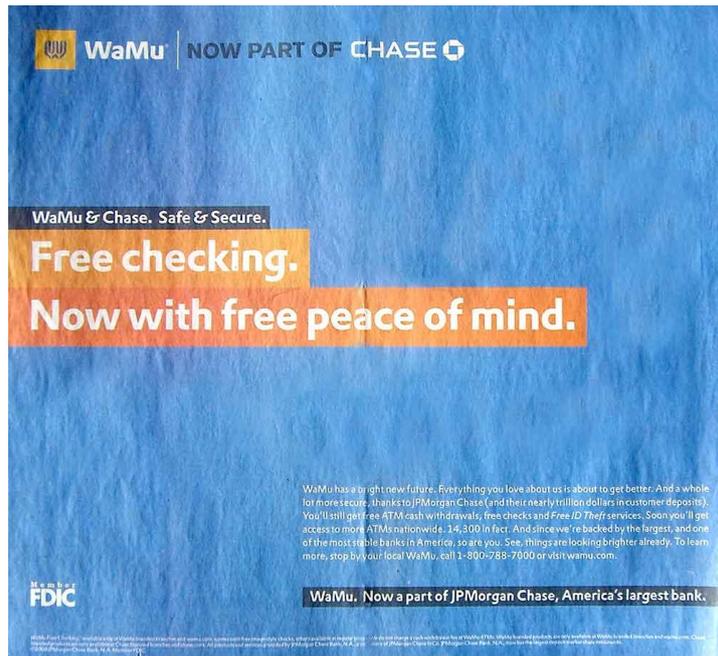


The advertisement features a vibrant yellow background with a textured, painterly appearance. At the top right, the website address 'www.powerbar.com' is printed in a small font. The main headline, 'The best day of your life will begin with a morning.', is written in a large, bold, dark blue font with a distressed, hand-painted texture. Below this, the question 'So, how about today?' is written in a smaller, black, sans-serif font. The central focus is a PowerBar Harvest product shot, including a whole bar in its purple and white wrapper, two broken pieces of the bar showing its granular texture, and two cinnamon sticks. The wrapper text includes 'PowerBar NEW DIPPED HARVEST WHOLE GRAIN ENERGY BAR CINNAMON ROLL flavored'. A small '2004' logo is visible in the bottom left corner of the ad. In the bottom right corner, the PowerBar logo is followed by the slogan 'Be great.'

Blue

Qualities: *Trust, security, responsibility, efficiency, calm, friendly, intelligence.*

- Blue is a very popular color among financial institutions as it can denote **trust**.
- The meaning of blue varies more greatly based on shade and hue than other colors.
- For example, a **darker blue** might evoke greater feelings of **security** while a **lighter blue** feels much **friendlier**.



Green

Qualities: Nature, growth, harmony, freshness and fertility.

- Green is closely tied with nature and the environment.
- Green is a very popular color with any business focused on environmental living and sustainability.
- Green can also be associated with wealth.



Purple

Qualities: *Royalty, wisdom, dignity, status, creativity, luxury, mystery.*

- Purple is historically associated with royalty.
- Purple dye was more expensive in ancient times and only the rich people can buy it. Hence purple is known as a royal color.



Pink

Qualities: *Romance, love, calm, femininity, gentleness, fragility.*

- In Western culture, pink is most often associated with femininity and is avoided as a color used to target men.
- The color has a calming effect.





White

Qualities: Purity, innocence, cleanliness, efficiency.

- White has a strong connection with purity and innocence in Western culture and is traditionally used in weddings.
- Considered a color of perfection.



Black

Qualities: Power, sophistication, prestige, security, emotion.

- The meaning of black changes greatly depending on what other colors it is used with.
- On its own, black has indicates elegance and prestige.
- Credit card companies offer “black cards” as their most prestigious credit card.
- Denotes strength and authority.



Gold

Qualities: *Prestige, wealth, energy, luxury.*

- Gold is often used as a secondary color in design to emphasize wealth.



Silver

Qualities: *Prestige, cold, scientific*

- Silver is similar to gold but with less luster.
- Gold is bright and exciting, silver is cold and scientific.

3.3:- Setting the environment for Colour works - Colour Temperature.

SETTING THE ENVIRONMENT FOR COLOUR WORKS

Create a good work environment:-

The value of creating a good work environment involves providing good lighting and reducing the presence of distracting color.

The effect of Environment on color:-

Color is a strange phenomenon. The exact same wavelength of light shown in two different environments may appear as two different colors.

The easiest way to deal with the effects of adjacent colors is simply to remove as much as possible from the surrounding environment.

Room lighting

While editing color, you all need to keep in mind the color of your room lights. Don't turn your room lights off completely, though; image editing should take place in a dim room, rather than a dark room. Dim the lights so they don't overwhelm the light of your monitor or your proofing light. If you have a window in your digital dark room, install some good blinds to moderate the effect of out door light.

Use a monitor hood:-

A monitor hood is a quick and easy way to help your monitor work much better. Reflected light off your monitor is much like flare in your camera lens. Most expensive monitor designed specifically for color managed environments come with a nice monitor hood. It should be big enough to ensure room light does not reflect off the monitor.

Set your computer's Desk top:-

Another source of distracting colors in digital imaging are the colors set for the computer desktop. The bright blue color scheme default with windows definitely can affect your ability to view the colors of your images accurately. It is preferable to set your

computer desktop colors to something boring and gray. The boring gray rule also applies to your nice desktop backgrounds.

Proofing light:-

The proofing light is the light that is used to evaluate the quality of your prints and compare these to the image on your monitor. Your monitor will be calibrated to match a particular viewing light. A proofing light must be bright like your monitor, and have a color temperature similar to the calibrated color of your monitor- close is usually good enough.

GTI PDV viewing lights are industry standard lights for presswork. These are calibrated to provide precisely colored D50 light.

Color temperature: -

Colour temperature is the temperature in degrees Kelvin of a black body (light emitted from a source), heated to produce a certain colour of light. Colour temperatures over 5,000K are called cool colours (bluish white), while lower colour temperatures (2,700–3,000 K) are called warm colours (yellowish white through red).

The standard used by printers for viewing printed color pieces is fluorescent lighting at 5000K. This is an average white light. It is very close to the white light from sun (5,400K). A light source of 7,500 K is recommended for checking press output for color uniformity.

Unit – IV

Page Layout

4.1 - House style – grids, guides and columns - templates – master page – style sheet - caption – quotes - headers and footers- folio- headlines and sub headlines - margins.

House style

House style is a set of guidelines used in schools, in the publishing industry, in companies and organizations of all types, that sets out things such as punctuation grammar, preferred spelling and capitalization, formatting of citations and other references, abbreviations and other matters related to both the readability and visual appearance of printed documents and Web sites.

House style may include matters such as the preferred fonts, colors, margins, and acceptable formats for electronic submission of materials

Grids :

A grid is a guide a modular compositional structure made up of verticals and horizontals that divide a format into columns and margins. Grid is a traditional layout term when working on page design software programs the term used is master page.

Guidelines in the grid are blue lines enables designers to line up graphic pieces to help their designs neat & tidy. In page design you can turn off the guides (lines) occasionally.

The grid pattern in your design provides consist visual appearance (flow) also it establishes unity for a single page (or) multi page format.

Guides and columns:

Guides are non-printing lines, often light blue lines, that aid in flow and alignment of text and positioning of graphics during page layout. Most desktop publishing software applications allow the user to drag guides onto the page or position them precisely using a dialog box. there are three basic types of guides.



Baseline grid in document window

A.First grid line

B. Increment between grid lines

TYPES OF GUIDES

Margin guides: A dotted or rectangular non-printing rectangle represents the page margins of a document. Margin guides are usually specified during initial page setup for the document and appear on all Master and publication pages.

Column guides: Some software may have special dialog boxes for setting up pre-set or custom columns with gutters. These guides can be placed on master or publication pages. Normally all pages begin with a single column — the space between the margins. Column guides control the flow of text within columns, keeping it out of the gutters.

Ruler guides: These nonprinting horizontal and vertical guides are used to align objects on the page. Typically ruler guides are placed on the page by dragging them from the horizontal and vertical rulers surrounding the publication.

Template: -

Document defaults saved permanently as a document than can be opened only as a copy. You can develop a set of standard document default for different application and save it as permanent template. A template is a locked document that normally allows you to open only a copy of the template, keeping the original template on file unchanged. Using a template to lay out elements usually involves less graphic design skill than that which was required to design the template.

Example: -

- 1) You can create one for your college letterhead, one for your business letterhead.
- 2) One for lesson plans, one for college handouts etc.

Master page:-

A **master** is like a background that you can quickly apply to many pages. Objects on a master appear on all pages with that master applied. Master items that appear on document pages are surrounded by a dotted border. Changes you make to a master are automatically applied to associated pages. Masters commonly contain repeating logos, page numbers, headers, and footers. They can also contain empty text or graphic frames

that serve as placeholders on document pages. A master item cannot be selected on a document page unless the master item is overridden.

Style sheet:-

A **Style sheet** is a feature in desktop publishing programs that store and apply formatting to text.

Caption:

A **caption**, also known as a **cutline**, is text that appears below an image. Most captions draw attention to something in the image that is not obvious, such as its relevance to the text. Captions can consist of a few words of description, or several sentences. A good caption

1. clearly identifies the subject of the picture, without detailing the obvious.
2. establishes the picture's relevance to the article.
3. provides context for the picture.
4. draws the reader into the article.

Folio

In a book, it is the number of each page. A single page or leaf (one half of a folded sheet of paper) that is numbered only on the front side is also a folio. In a newspaper the folio is made up of the page number plus the date and name of the newspaper.

Header and Footer

Header ←

Page

→ Footer

In a document, headers are what they call the standard text that shows up on the top of each page (or every other page). Footers are what they call the standard text that shows up at the bottom of each page (or every other page).

Margin

Desktop printers normally have a nonprintable region around the edge of the paper that is between 0.17 and 0.5 inches wide. Nothing within that region will print. If you want to set the page margins for your publication to match the minimum margin that is supported by your printer, you must first determine the size of your printer's nonprintable region.

4.2 - Handling originals/photo - cropping, scaling and skewing

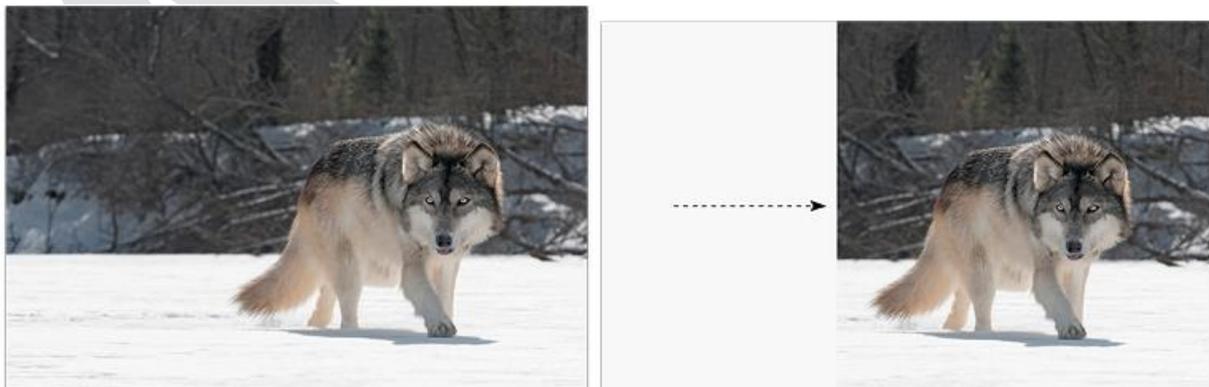
HANDLING PHOTO (CROPPING AND SCALING)

- ✓ Do not use sharp pencils or ballpoint pens to mark instruction art.
- ✓ Avoid using paper clips and other devices to hold the art.
- ✓ Keep art flat. Do not roll up or fold.
- ✓ Use a slip sheet (tracing or light paper) to protect the art.
- ✓ Place markings (crop, etc) only on tracing or cover paper.
- ✓

Preparing art for printing: -

Once you select a photograph or drawing, there one certain steps to carried out before printing. These include cropping, sizing (scaling) and retouching.

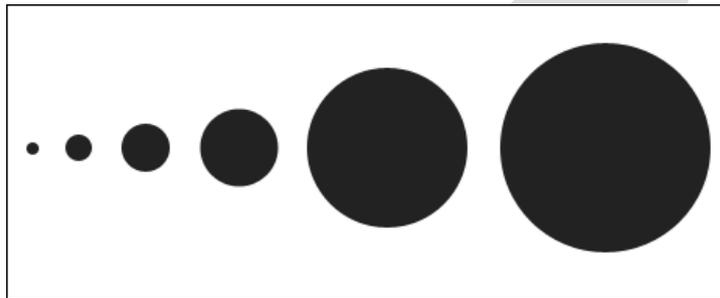
Cropping: -



It is the process of removing unwanted material or content from the art. It is judicious editing with an eye toward enhancing the effectiveness and design characteristics of the art. Cropping is done for the following purpose.

- ✓ To emphasize the center of interest.
- ✓ To eliminate an unwanted portion.
- ✓ To compensate for technical errors.
- ✓ To adjust the shape to fit a given layout.
- ✓

Scaling: -



Once art has been cropped it must be scaled or reduced or enlarged, to fit the desired spot in layout. Other terms of scaling are proportioning and sizing. Proportion is the key concept in enlarging or reducing photographs. This can be done by following three methods.

1. Formula method
2. Diagonal method
3. Proportioning wheel method

1) Formula method: -

This method can be started in an equation that is simple to calculate.

$$\text{New width} = \text{New depth}$$

$$\text{Old width} = \text{Old depth}$$

The unknown dimension either width / depth is indicated by "X"

$$\frac{6 \text{ (N. W)}}{8 \text{ (O. D)}} = \frac{x \text{ (N.O)}}{10 \text{ (O .D)}}$$
$$60 = 8x$$
$$X = 60 / 8$$
$$X = 7.5$$

2) Diagonal line method: -

This is another method of scaling the photographs. A sheet of clear plastic or skin paper is placed over the photograph.

Draw a diagonal line (AD) from the lower left corner to upper right corner of original photograph; let us assume that you wish to reduce your photograph to 18 picas (AF). Using your setsquare draw a vertical line from F, until it touches at G now measure the dimension of FG. This will be the required height for your picture. The diagonal line shows how a photograph can be enlarged or reduced in proportion.

Some eiders prefer this method because it allows them to keep the art in view throughout the process. However the other two methods are more popular and less cumbersome.

3) Proportioning wheel method: -

Proportioning wheel uses same principle as the formula method. This proportioning wheel method most commonly used and it does not require multiply and divide.

This wheel consist of two circular pieces. One is smaller than the other and attached together in a center. So that they can revolve independently.

To operate the wheel the known dimension, the width is located on the outer circle is matched with original art width located in inner circle. in that alignment the two measurement of other dimensions, usually depth gets alignment by itself. An arrow in the window of the wheel shows the percentage of reduction or enlargement.

4.4 - Layout formats for Magazine, Newspaper, and Bookwork.

Magazine Formats:

Magazine sizes may vary from a small pocket size to newspaper tabloid size due to its content/nature. Following factors are considered before making a format.

- Ease of handling.
- Adaptability to content of format.
- Mechanical limitation of printing press size

Small magazine are easy to handle and contain text matter. Large size magazine are best for picture as they provide greater impact. Most of the magazines presents its text

and illustration on a relatively equal basis and use a format adequate for both about 8 ½" by 11". The international A4 paper size is still popular magazine size.

Cover page:

There should be direct connection between the cover and content. Cover is printed on better quality paper and ink use of two colors for page. Back covers are most of the time and used for advertisement purpose back covers can be used to expand the front covers. Picture to provide a wrap around cover.

Content page:

Content page is next to the cover page. Content page typography is designed as desired by the designers. No specific rule is applied as like inside pages. Here we can see lots of white space, a graceful use of type, a variety of rules to create reader attention. Other wise it will irritate the readers. Some magazine does not have content page example is News magazine.

Listings are like content pages contain information and reference pages. Rather than editorial, but the design objects are quite different. These pages may carry programs, reviews, names, address of supplier, advertiser, the dates and venues of events and so on.

Sequence:

This of the magazine will show the characteristic of the magazine. This will have a variety of items such as articles; review commands appreciations, short stories, criticisms etc., Bookwork format:

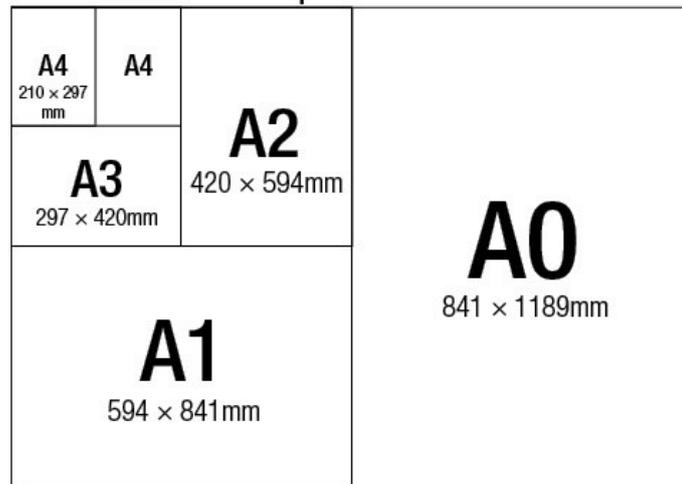
Formats:

A4 – 297 X 210 mm

A5 – 210 X 143mm

A4 trimmed page size is most common size for printing of magazine, newsletter and all kind of printing stationary. It is universal size.

ISO International Paper Size Standard - A Series



Standard book formats:

Most of the books we see from self-publishers are either 5-1/2" x 8-1/2" or 6" x 9." They are good, readable sizes that will work for many types of books.

The traditional terms for describing book formats are derived from early printing methodology and the size of early handmade sheets of paper.

Paper Sizes: the most common names for the original size of paper from which the formats described below were created are:

- **Imperial** (30 in. by 22 in.)
- **Royal** (25 in. by 20 in.)
- **Demy** (22 ½ in. by 17 ½ in.)
- **Crown, cr** (20 in. by 15 in.)
- **Foolscap, fcp** (17 in. by 13 ½ in.)
- **Pott** (15 in. by 12 ½ in.)

When two leaves (four pages when printed on both sides) were printed on a sheet so that it could be folded once, collated with other folded sheets and bound, the format of the volume was a "**folio**". When four leaves (eight pages) were printed on the same size sheet, which would later be folded twice, the format of the resultant volume was a "**quarto**" (four leaves). The term "**octavo**" relates to the sheet having eight leaves printed on it. The octavo is the most general size of a book, and the printed text is so arranged that, when the sheet is folded, the sixteen pages follow consecutively (see illustration).

Name	Imperial- inches	Metric- mm
Demy	9 x 6	229 x 152
Royal	9 1/4 x 7 1/2	235 x 191
Crown Royal	11 x 8 1/4	280 x 210
Classic hardback or C format paperback	8 3/4 x 5 5/8	222 x 143
Trade' paperback or B format	8 x 5 1/4	198 x 129
A format	6 7/8 x 4 1/4	175 x 111

Book Formats & Paper Sizes

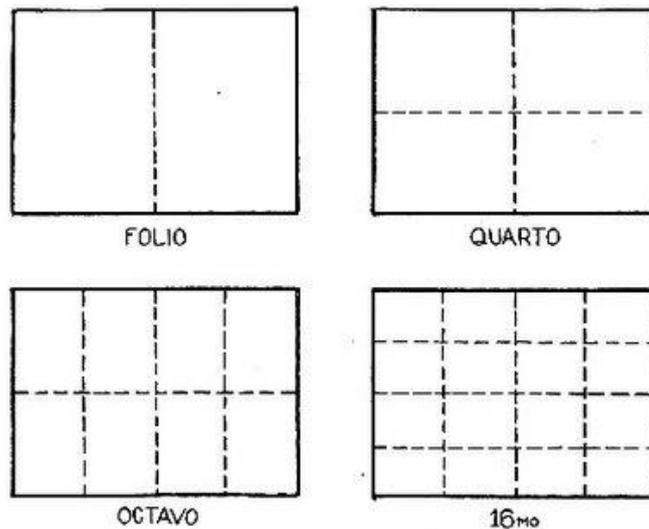


PLATE XLII. Diagram to show methods of folding sheets of paper.

Today some booksellers are providing the height of a book in inches or centimeters rather than using these early terms. The following is a guide to convert book formats to approximate book sizes:

- **Folio:** more than 13 inches tall
- **Quarto (4to):** approx. 10 to 13 inches tall, average 12 inches
- **Octavo (8vo):** approx. 8 to 10 inches tall, average 9 inches

Newspaper:-

Most newspaper are printed in two formats

- 1) Broad sheet (13"x 21")
- 2) Tabloid (11"x14")

Broadsheet:-

It is usually in 13 inches wide by 21 inch's deep. These pages often are laid out in fix columns. Each column is about 12 picas or two inch's, wide with a pica of gutter space between columns. Many broadsheet newspapers use a variety of layout formats on page one and sections.

Tabloid: -

It is usually in 11 inch's wide by 14 inch's deep. These pages are usually laid out on either a four column or five-column format.

Inside pages: -

Pyramid format – Here advertisements are stacked up either to the right on the page.
Modular format – Here advertisements are “squared off” across the bottom of the page.
Modular Ad format –Here advertisements are laid out as line in pyramid but stories (text) matter is layout in modular approach.

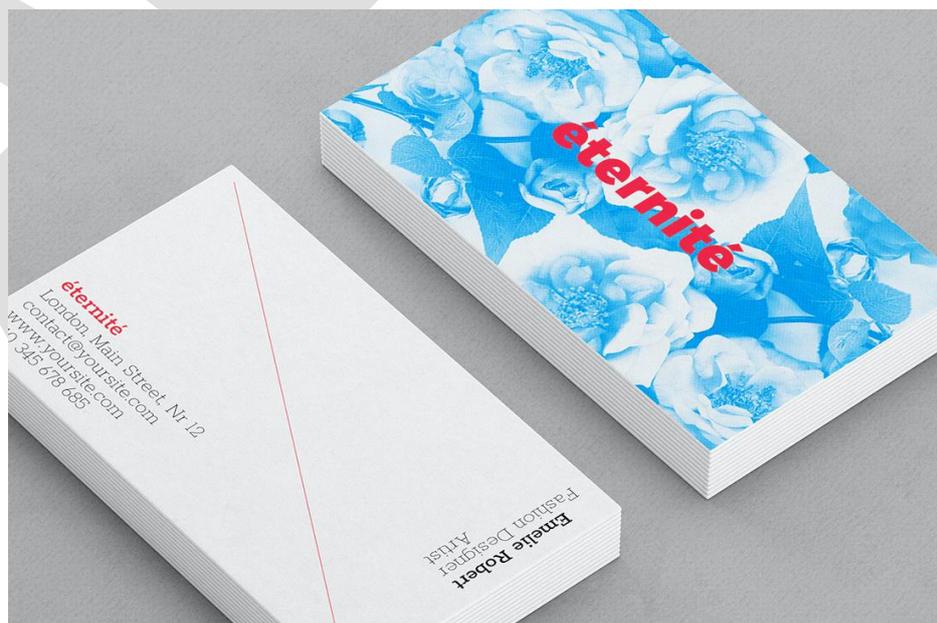
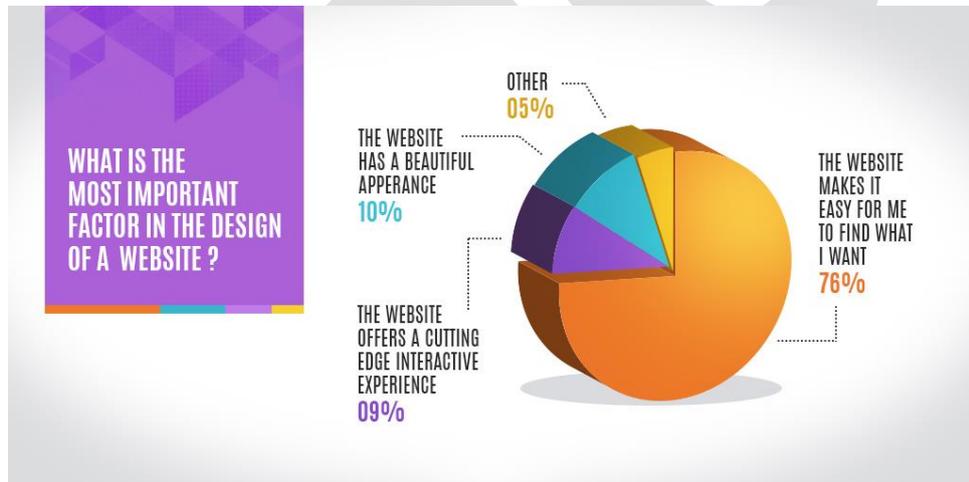




MINIMALIST GRAPHIC DESIGN

Minimalism is the concept of minimizing distractions from what's truly valuable or essential. Minimalist graphic design is a philosophy of creating something where every element serves a purpose. It is simple, clean and beautiful. It is highly usable. These designs are easy for users to understand and engage with it.

Minimalist graphic design uses typography and design elements with a purpose to create a simple and usable visual display.





Here are the tips for creating a modern minimalist graphic design

1. Use Plenty of White Space

White space is an essential element when it comes to minimalism. Using plenty of space helps create a sense of peace and creates a visual focal point in the design.

Every piece of a minimal graphic design should have meaning. And it should have plenty of space around it so that that concept is clearly discernable.

2. Keep Elements on a Grid

A grid can help a simple design look as simple as it should. Grids keep information and elements organized and help you create logical groupings of elements.

A grid makes design elements easy to follow thanks to logical patterns. So even in a design that initially feels less minimal, a grid can create the right spatial relationships to make it work in harmony.

3. Plan for Consistency

When planning a minimal graphic design, make sure the elements of that minimalism carry through the project. A minimal homepage with cluttered interior pages can be visually confusing.

While some pages must have more content than others, make sure the minimal theme is obvious.

4. Create Balance Without Symmetry

Not every minimal design needs to be perfectly symmetrical. It can actually be more engaging if the design isn't split down the middle.

Use space to create the balance between contrasting elements.

5. Simplify Color Choices

When thinking about color and minimalism stick to the most ridged of palettes. Pick a color (maybe two) and use them exclusively throughout the design.

This single color adds emphasis where it is used and contributes to the overall feeling of simplicity in the design.

6. Pick Highly Readable Typefaces (Selective)

Develop a font palette with one or two type families and create a hierarchy for how to use type elements. Stick to this hierarchy like you would a grid. It should be the foundation of the type design for a minimal project.

Pick a typeface that's easy to read and scan quickly. Serif or sans serif options are often best with letters that have a normal x-height, regular weight and plenty of line spacing. Use text that's big enough to read at a normal viewing range but not so large that it overwhelms the user.

7. Make Everything Intentional

When you aren't working with a lot of design elements, everything must serve a purpose. Place, design and create interaction with intent in minimal designs.

If an element doesn't contribute to the overall goals of the project, then remove it.

8. Keep It Simple

Less is more when it comes to minimal graphic design projects. Strip as much away from the design as you can to achieve this. When going simple, remember to include just enough to get the message across at a glance or so little that users want more, like the example above.

10. Incorporate Imagery

One of the things that many designers forget about is working with a minimal project is images. When picking out photos, look for photos that also feel simple and easy-going. Avoid cluttered scenes or crops that feel exceptionally tight

Conclusion

Your goal should be functional and elegant when thinking minimally. Make it modern with one focal element that really sets the tone of the project and overall design.

Unit - V

Print Publishing

Dummy preparation

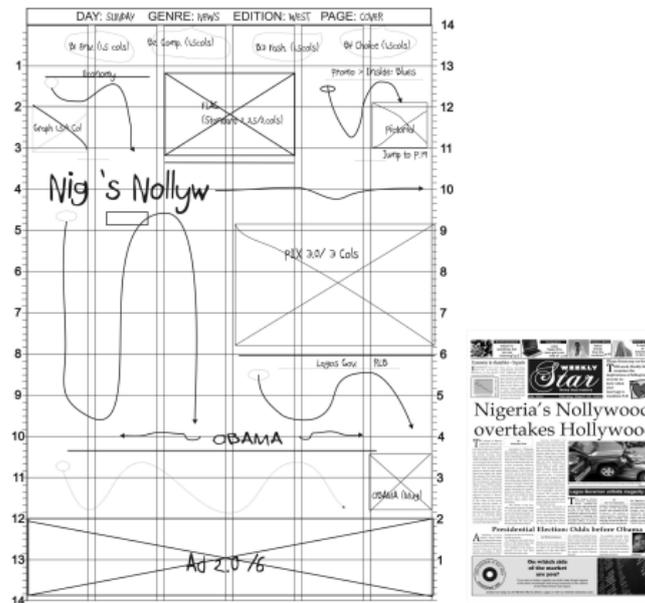


Figure 3: The dummy for the Weekly Star

A dummy sheet is a sheet with a grid on it and is used to draw publication layouts. The most important thing to remember is that your dummy book should look clean and professional, it should indicate where each element (article, headline, photo, graphic etc) will be placed.

In the publication business, a haphazard operation will likely mean all kinds of embarrassing mistakes creep into a publication: stories published twice, photos mislabeled, headlines under wrong stories, parts of stories cut off, wrong dates, missing page numbers, big blocks of white space, etc.

Proofreading:-

Proofreading involves checking for grammatical, spelling, and mechanical errors, which may include problems with verb, tense, sentence completion, alternate spellings, capitalization, and punctuation. Proofreading is often made easier by the use of coloured ink, bracketed or parenthetical notations, or proofreading symbols for identification and correction.

Proof reading marks:-

Meaning	Symbol	Example
Comma		Apply pressure to the first second and third bolts.
Delete		Remove the end fitting.
Delete and close up		Delete and close up the gap.
Em dash		It was the beginning so I thought.
En dash		The value is 120 408.
Flush left		Move left.
Flush right		Move right.
Hyphen	-	A valuable byproduct was created.
Insert		The box is not inserted correctly.
Let Stand	stet	Remove the battery cables.
Lower		16 ²
Lower case	/ or lc	The Engineer and manager agreed.
Move left		Remove the faulty part.
Move right		Remove the faulty part.
Move to a new position		All members attended who were new.
New paragraph	¶	The box is full. The meeting will be on Thursday.
Period	⊙	Rewrite the procedure. Then complete the tasks.
Raise		16 ₂
Remove paragraph break	no ¶	The meeting will be on Thursday. no All members must attend.
Run in with previous line		He rewrote the pages and went home.
Semicolon	∴	He left; however, he returned later.
Set in bold	(bf)	This is the only time we can offer this price (bf)
Set in italics	<i>(ital)</i>	The book was titled Technical Writing Styles (ital)
Set in small caps		Set the MFG REGISTER to zero (sm cap)
Space	#	The procedure is incorrect.
Spell out	○ sp	The (info) was incorrect. sp
Subscript	∇	16 ₂

Meaning	Symbol	Example
Superscript	^	16 ²
Transpose	~	Remove the fitting end.
Underscore	—	The part was listed under <u>Electrical</u> .
Wrong font	Ⓜ	This is the first step in the procedure. Ⓜ

Printer’s marks:-

When you prepare artwork for printing, a number of marks are needed for the printer.

Crop Marks

Adds fine (hairline) horizontal and vertical rules that define where the page should be trimmed. Crop marks can also help register (align) one color separation to another. By using together with bleed marks, you can select overlapped marks.

Bleed Marks

Adds fine (hairline) rules that define the amount of extra area to image outside the defined page size.

Registration Marks

Adds small “targets” outside the page area for aligning the different separations in a color document.

Color Bars

Adds small squares of color representing the CMYK inks and tints of gray (in 10% increments). Your service provider uses these marks to adjust ink density on the printing press.

Bleed

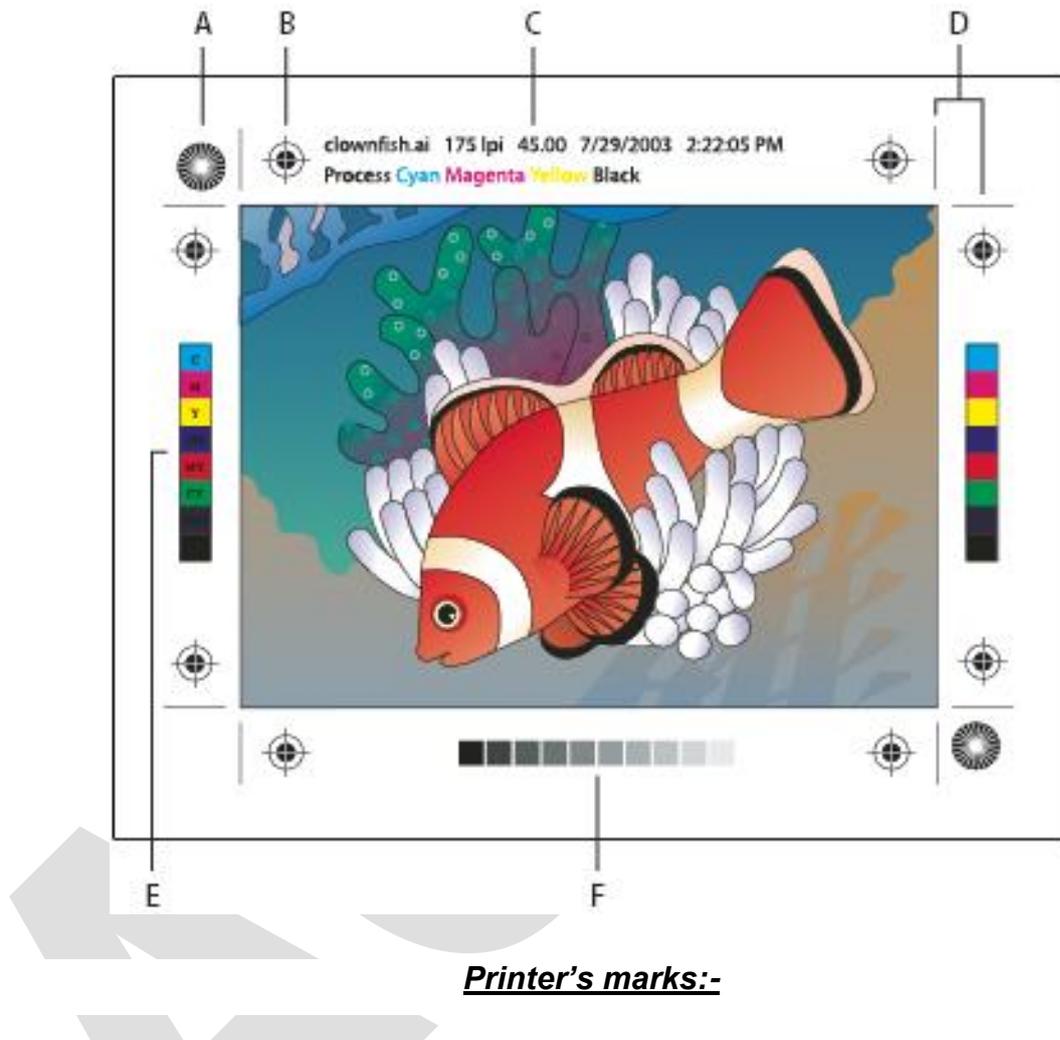
The parts of text or objects that extend past the page boundary to account for slight inaccuracy when trimming.

Slug

An area outside the page and bleed that contains printer instructions or job sign-off information).

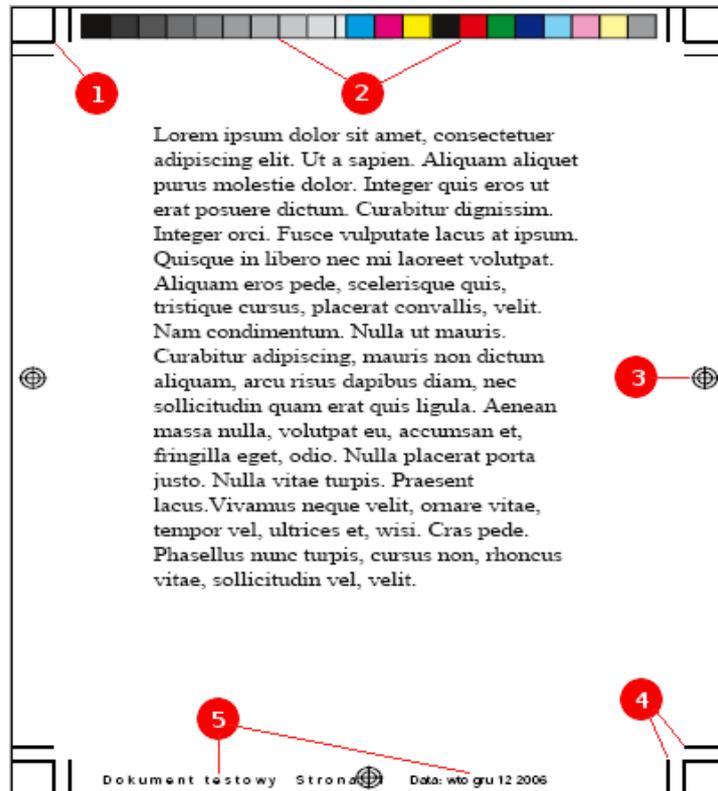
Trim Marks

Fine (hairline) horizontal and vertical rules that define where the page should be trimmed. Trim marks can also help register (align) one color separation to another.



Printer's marks:-

- A. Star target (not optional)**
- B. Registration mark**
- C. Page information**
- D. Trim marks**
- E. Color bar**
- F. Tint bar**



- 1 **BLEED MARKS**
- 2 **COLOR BARS**
- 3 **Registration mark**
- 4 **Crop marks**
- 5 **Page information**

CONSIDERATIONS FOR PRINT PRODUCTION

Following are the major factors to be considered for the effective print production.

- Budget
- Deadline
- Production realities

Budget:-

Budget is a prime criterion to be taken as important consideration for print production. You should stay within limits of the client. Try to commodore your planning, production cost with in their reach. You can do this by proper execution of job within the schedule, reducing wastage, keeping your machinery fit always. Sometimes you can sit with your client and bargain for better settlement.

Deadline:-

Our industry always run on deadline rush jobs are a major portion of our income. Ours is a customers-oriented business so we have to depends and fulfill their requirements to keep our business running. If any deviation occurs, you sit with the customer explain the read situation to comprise. Other wise improve tour system efficiency to deliver anything without lack of any downtime, proper inventory control, planning etc.

PRODUCTION REALITIES:-

Paper:-

It is extremely very important for all jobs. As it become one of the major expenses, one should know the exact requirement of paper quality, quantity, size and process folding techniques.

Exmample;

Uncoated papers – Text or line printing.

Coated papers – Halftone or Color printing.

Weight papers – 25-150 gsm (bookwork).

Shade – Bright white, Off-white to cream.

Thickness of the paper – Caliper or bulk.

Machinery:-

Choose the right process.

Machine limitations (production possibilities).

Quality/wastage/cost per color printing.

Planning your jobs (machine rotating/workflow).
Manpower requirement.

Raw Materials:-

Better inventory control
Choosing a material for right job.
Defects in paper/ink etc.

Others:-

Finishing operations/style.
Technical data.
Quality Control.
Packing, dispatching and distribution.

5.2 - Designing of other printed products – brochure, leaflet, visiting card, invitation, booklet and folders.

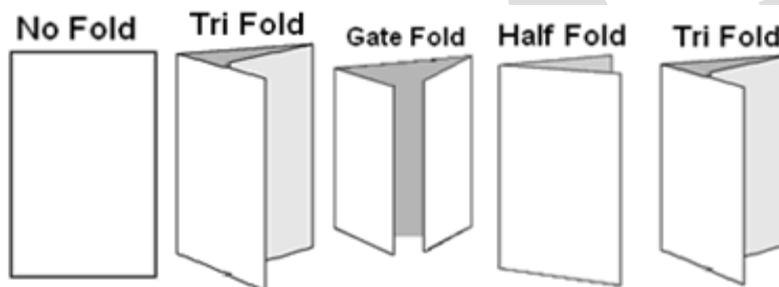
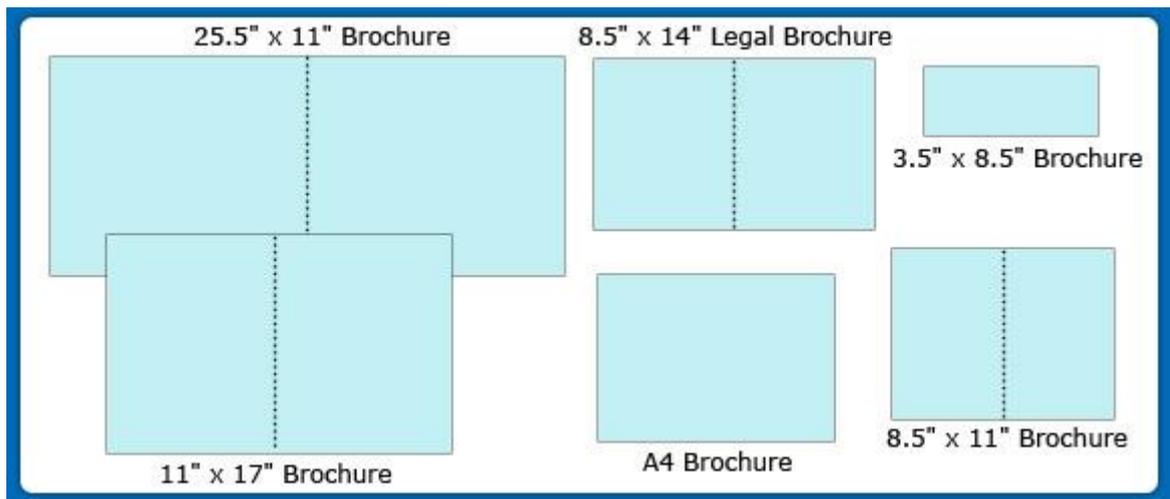
Brochure: -

A **brochure** is an informative paper document, can be folded into template, pamphlet or leaflet. Brochures are advertising pieces mainly used to introduce a company or organization and inform about products and/or services to a target audience.

The two most common brochure styles are single sheet and booklet forms. Single-sheet brochures are the bi-fold (two panels on each side,) and the tri fold (six panel on each side). Booklet brochures are made of multiple sheets most often saddle stitched (stapled on the creased edge) or “perfect bound”.

Brochures are often printed using four-color process on thick gloss paper to give an initial impression of quality.

There are four standard **brochure sizes**: 8.5 x 11, 8.5 x 14, 11 x 17, and 11 x 25.5. Choose a **size** that matches the quantity of information you want to get across.



Brochure creating Steps

1. Create a plan.
2. Choose your format.
3. Choose a paper type that is durable yet still fold-able
4. Gather your content - Content includes copy, photos, graphics, and an order form or response card if necessary.
5. Use photographs that reinforce your message, such as pictures of customers using your product.
6. Lay out the content and print

Design Tips:

- The first is to break up long paragraphs of text into bullet points
- use white space to create a natural flow from section to section.
- Use headers and sub headers to make your brochure easy to read
- Most importantly, keep your design simple.
- Using your brand colours for good recognition and limit the colour scheme to 2 or 3 only.

Leaflets:-

Leaflets are a kind of open letter or postcard, designed to be given to people, either by hand or by post, inserted in local newspapers for distribution, or other venues such as shops, restaurants indeed it should catch someone's eye.

Standard sizes of leaf lets are A4, A5.

There are various kinds of leaflets.

- Explanatory leaflets
- Warning leaflets
- Instructional leaflets
- Service leaflets
- Product description leaflets

The function of leaflets is as follows:

- Selling
- Provision of information
- Permanent or semi permanent reference
- Public relations

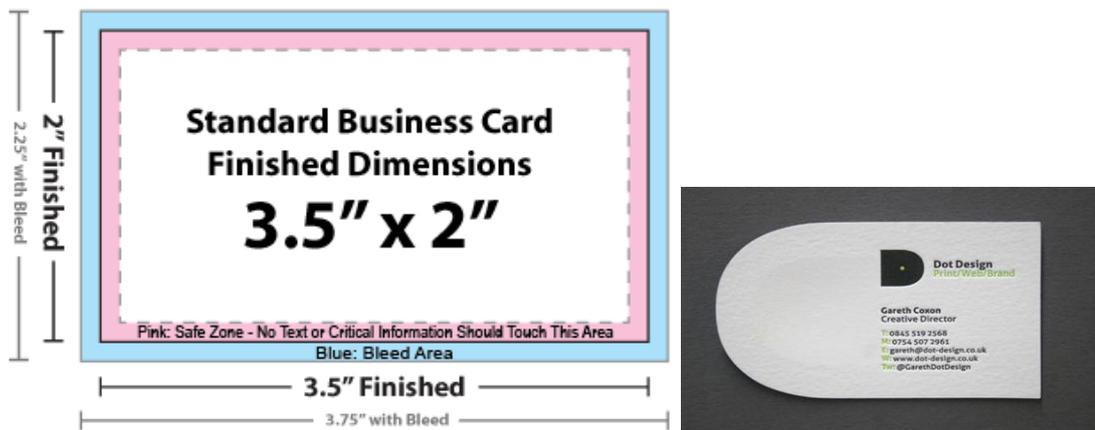
In many advertising leaflets text are arranged in asymmetrical design to bring dynamics. The text can be forced into short punchy lines. Do not Choose too small type, and too large to avoid any vulgar appearance.

Booklets:-

It is direct mail piece carries more bond pages either saddle stitched or side stapled or sewn. The printer produces booklet pages in “**signatures**”. Signatures come in multiples of 4, 8, 12, 16 and so on. Booklets come in a great variety of shapes and sizes but a favorite size is 4 x 8(1/2). Booklets have either self or separate covers. Booklets jobs include annual reports, employee hand-books, company histories and speech reprints. Its typography, margin and other design aspects looks similar to a book expect the hard cover.

Visiting card:

Visiting card, also known as a calling card, is a small paper card with one's name printed on it, and often bearing an artistic design. The standard dimensions for a printed visiting card is **3.5 x 2 inches**.



Design Tips:

- Standard business cards are 2" x 3.5", in either vertical or horizontal orientation. Horizontal is more traditional.
- Perhaps the most crucial aspect of any business card is a sense of hierarchy within the design.
- “Put more emphasis on the most important points and less emphasis on the least important”.
- The bottom line of your business card should give your customers an insight into your brand by using consistent typography, colours, copy, and overall, giving an impression of the values/traits your company brand has.
- Use special finishes- spot UV, Embossing, Die Cut etc
- Limit your colour scheme with in 2 or 3.

Folders:

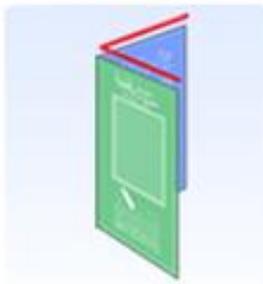
Presentation folders are materials that are usually presented to the client to give an introduction about a company’s profile, services and other info especially when dealing with clients. There are folders that are completely packed with inserts like brochures, business cards and a CD presentation; while some minimalist folders only show short details displaying their company logo, brief profile and contact numbers.

Corporate folders are often printed on thick, sleek card stock to give an initial impression of the quality. Message-wise, it should also depict the company’s purpose and relevance.



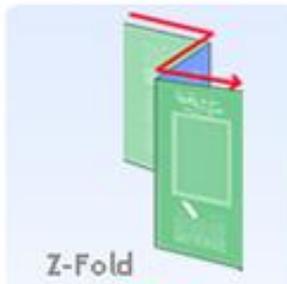
Folding Options

2-Panel Fold

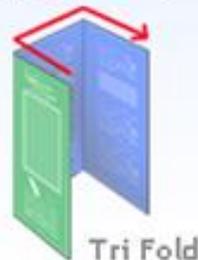


Half Fold

3-Panel Fold

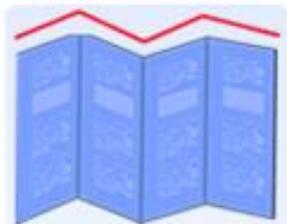


Z-Fold



Tri Fold

4-Panel Fold



Accordion Fold



Roll Fold

For custom folds, give us a call and we will help you setup a custom order.

5.3 - Software used for designing and page layout - Photoshop, Corel Draw, PageMaker, Adobe In design, illustrator and Quark Xpress - Basic tools & application.

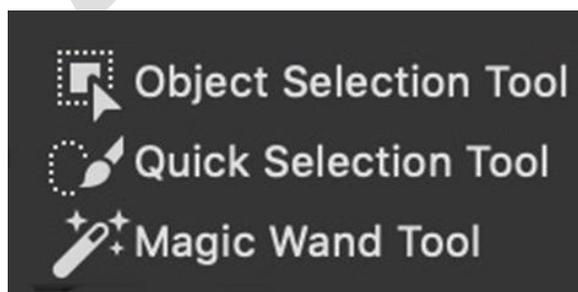
PHOTOSHOP

Intro & Features:

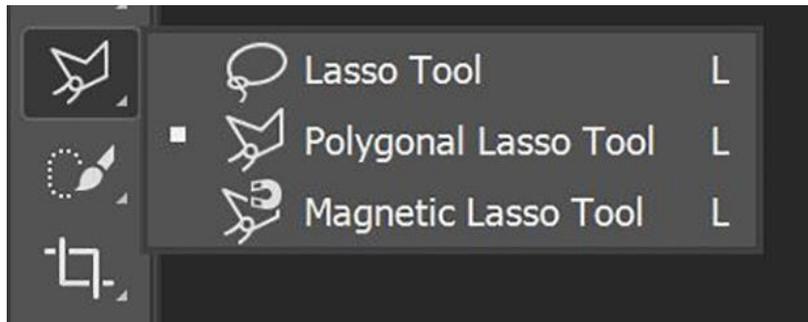
- Adobe Photoshop is the most popular graphic design software and is used by millions of artists around the world.
- It is a Raster based (Bit Map) image editing software
- It is used to create banners, posters, websites, or logos etc
- One can organize Photos and videos can be easily and quickly imported into the software.
- It can support several color models including RGB, CMYK, Bit map, Gray scale and indexed
- Photoshop uses its own PSD and PSB as file extension.
- It can support PSD, PNG, JPEG, TIFF, HEIC, PSB file formats.
- The current version is Photoshop 2022 (version 23.1)
- Main features are Layers, Vector mask, Photoshop 3D, smart objects, creative cloud

Tools

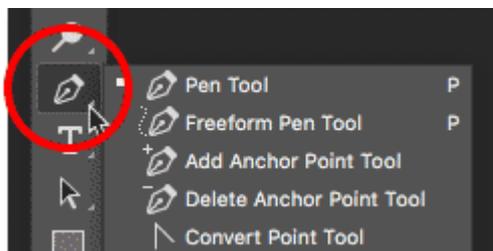
- ❖ Selection tool



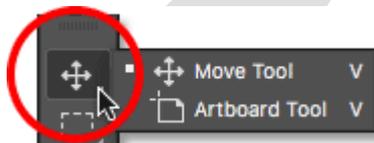
❖ Lasso Tool



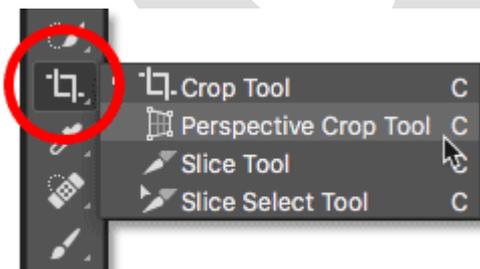
❖ Pen Tool



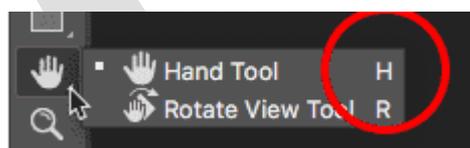
❖ Move tool



❖ Crop Tool



❖ Hand Tool



- ❖ Zoom Tool



- ❖ Blur Tool



- ❖ Patch Tool
- ❖ Slice Tool
- ❖ Dodge & Burn Tool
- ❖ Brush tool
- ❖ Clone stamp tool
- ❖ Gradient tool
- ❖ Hue & Saturation tool
- ❖ Level tool

		Adobe Online
Marquee Tool (M)	 	Move Tool (V)
Lasso Tool (L)	 	Magic Wand Tool (W)
Crop Tool (C)	 	Slice Tool (K)
Healing Brush (J)	 	Brush Tool (B)
Clone Stamp Tool (S)	 	History Brush Tool (Y)
Eraser Tool (E)	 	Gradient Tool (G)
Blur Tool (R)	 	Sponge Tool (O)
Direct Selection Tool (A)	 	Type Tool (T)
Pen Tool (P)	 	Rectangle Tool (U)
Notes Tool (N)	 	Eyedropper Tool (I)
Hand Tool (H)	 	Zoom Tool (Z)
Foreground Color	 	Switch Colors (X)
Default Colors (D)	 	Background Color
Standard Mode (Q)	 	Quick Mask Mode (Q)
Screen Modes (F)	  	
Switch to ImageReady	 	

COREL DRAW

Introduction:

Coreldraw was earlier built only for Windows OS; it is now available for Mac as well. With this graphic design program, you can create professional vector illustrations. There are powerful design tools to help you work faster and smarter. You will find numerous customization options, whether you are working on logos, web design, or print projects. Coreldraw now uses AI technology to provide you with livesketch, which converts sketching into precise vector curves. The suite contains tools for graphic design as well as layout. It has Photo-Paint and Corel Font Manager for photo editing and font management.

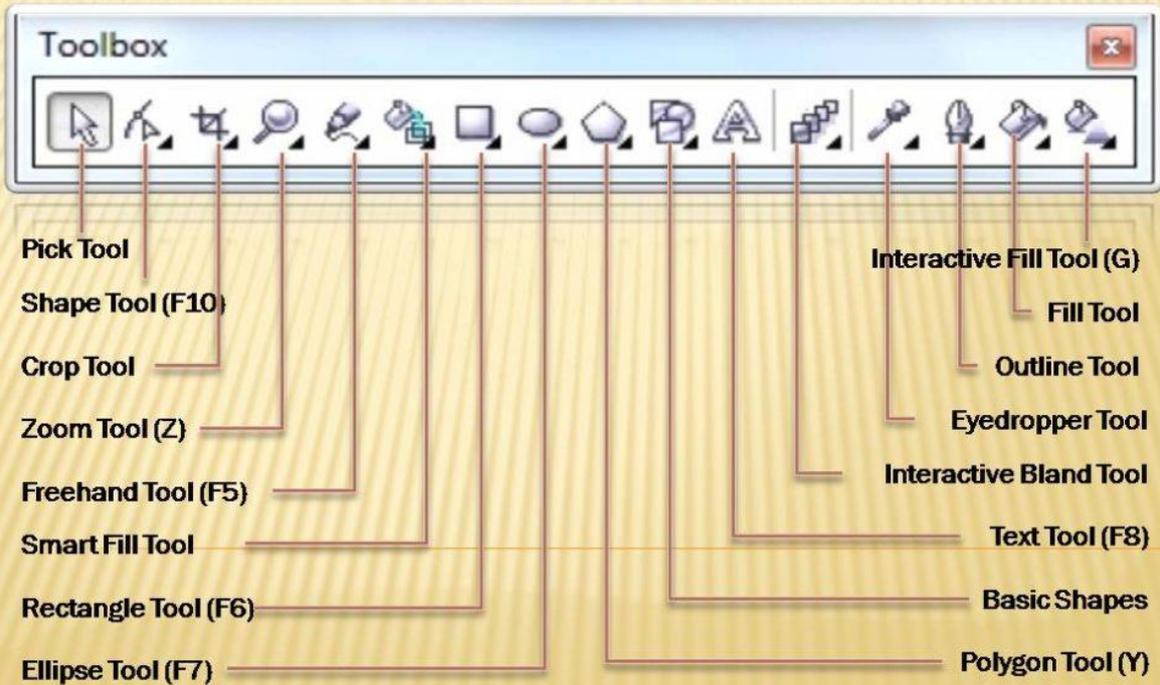
The software has web graphic tools and presets to develop creative web content; you can publish directly into your Wordpress site through it. The file compatibility is also overwhelming; the program supports over 100 file formats.

Platform: Windows and Mac

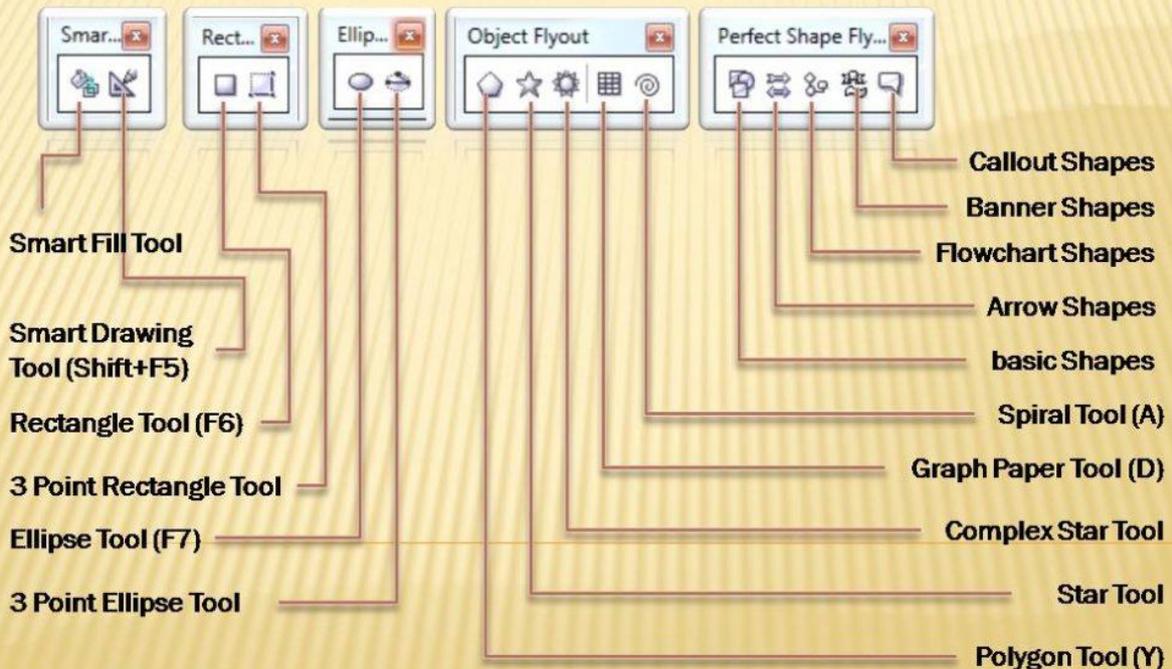
Tools:

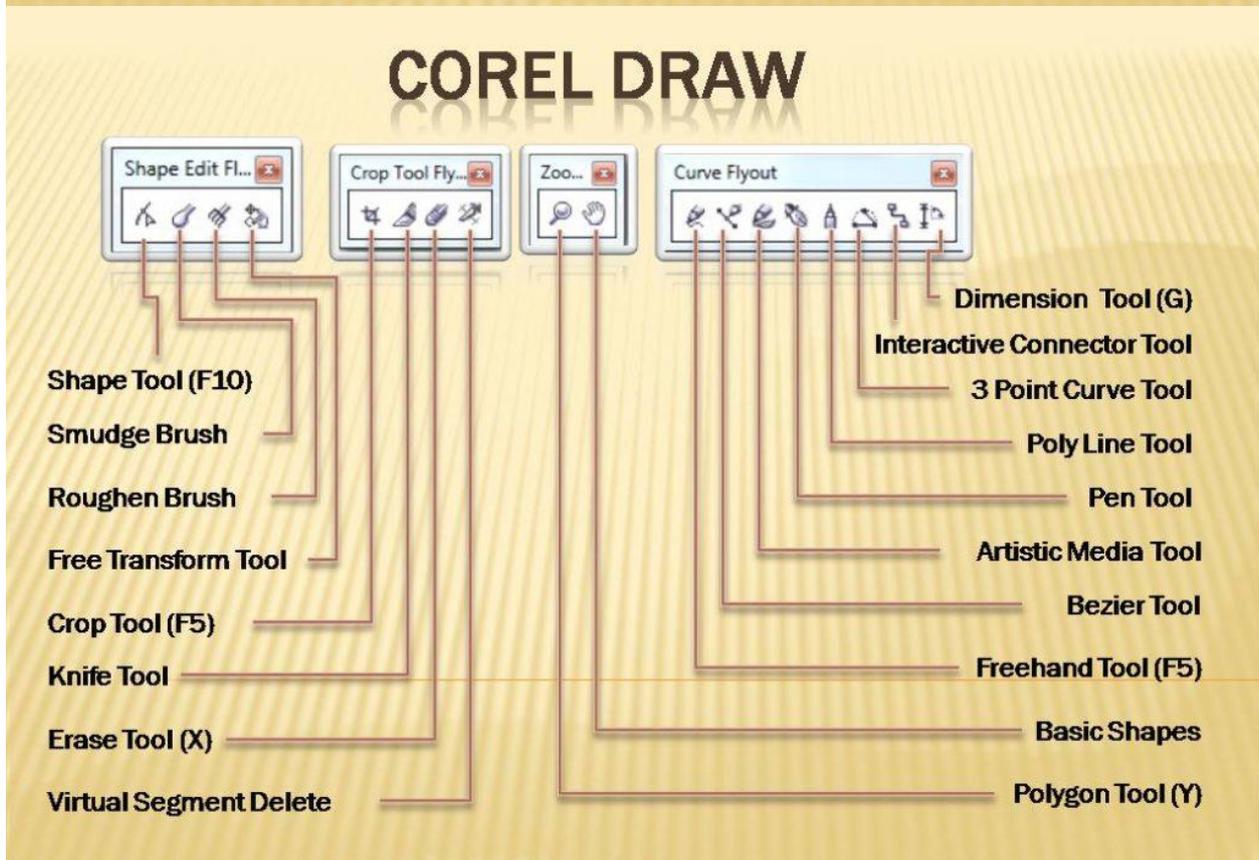
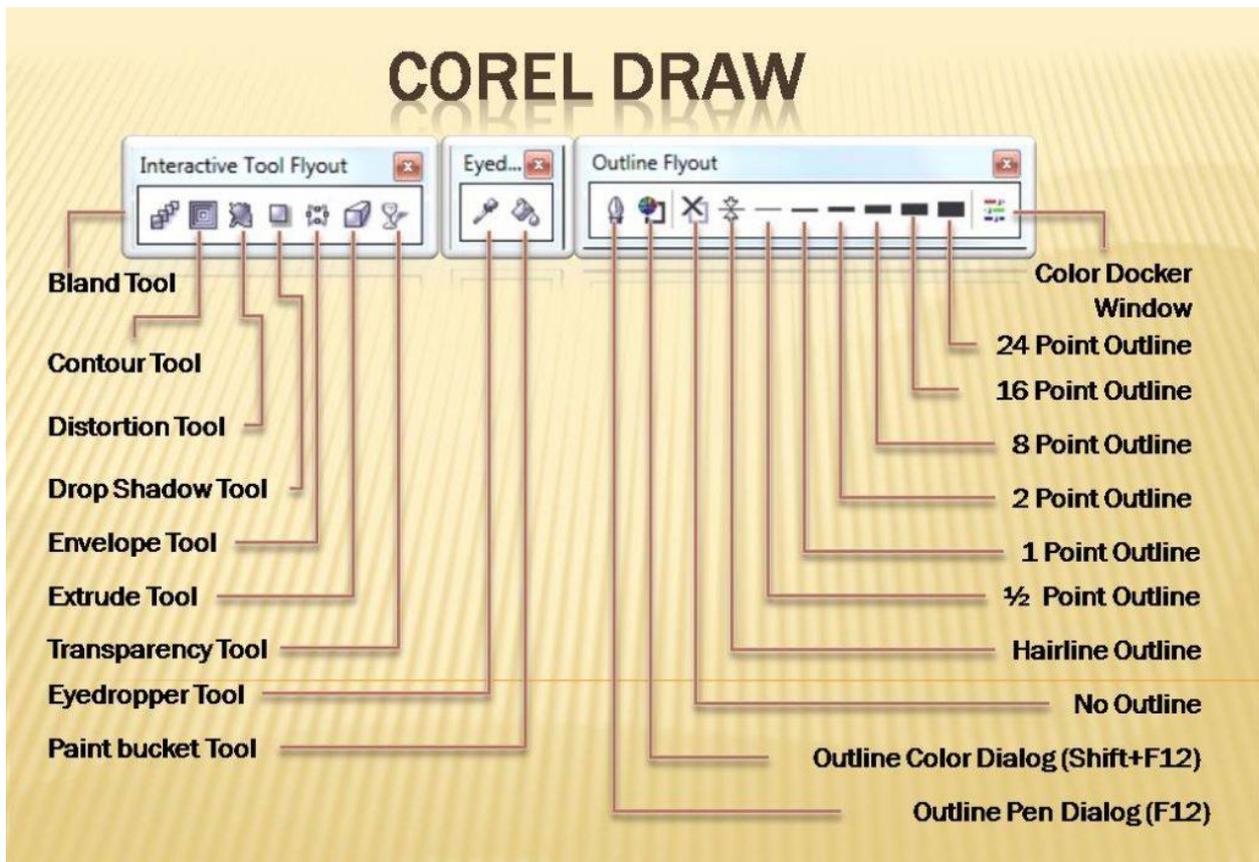
Pick tool
Shape tool
Hand tool
Freehand tool
Rectangle tool
Ellipse tool
Graph tool
Star shape tool
Text tool
Interactive extrude tool
Paint Bucket tool
Outline tool

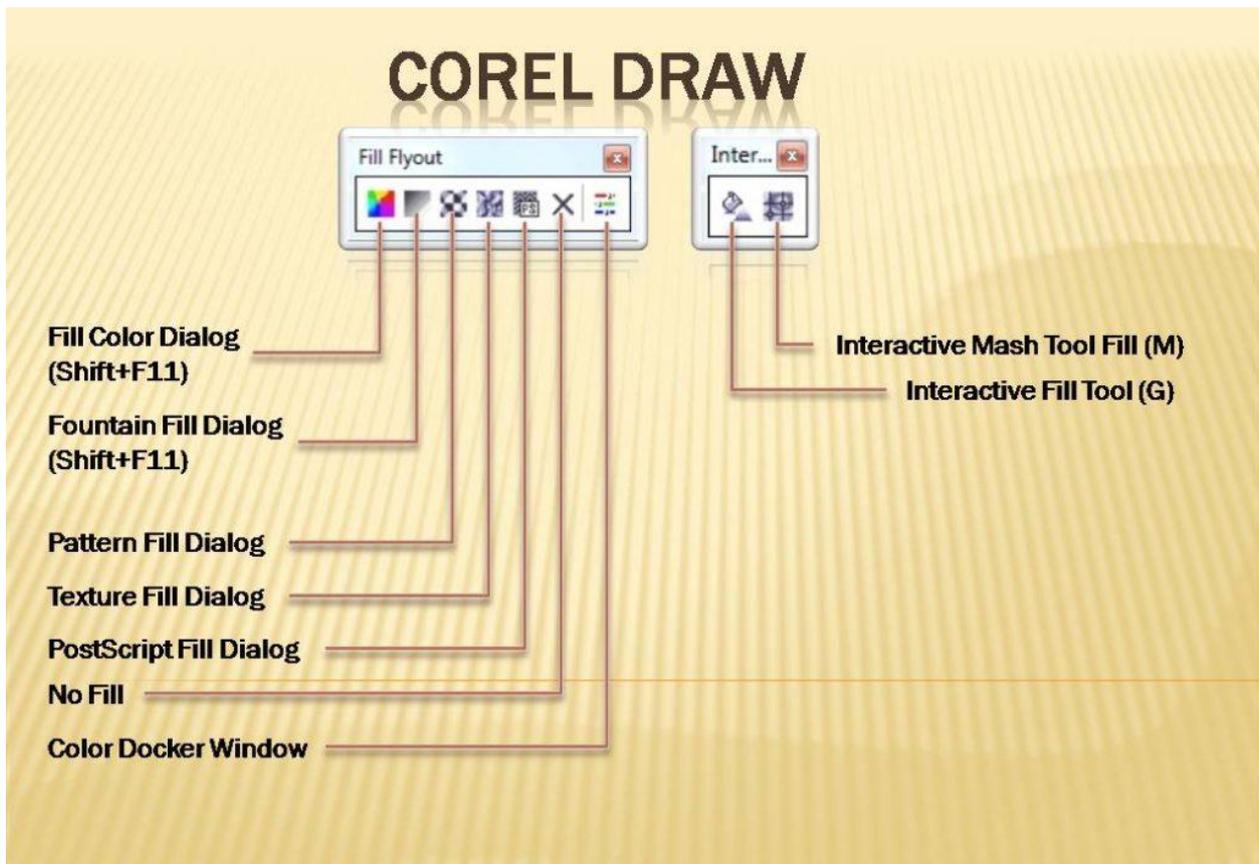
COREL DRAW



COREL DRAW







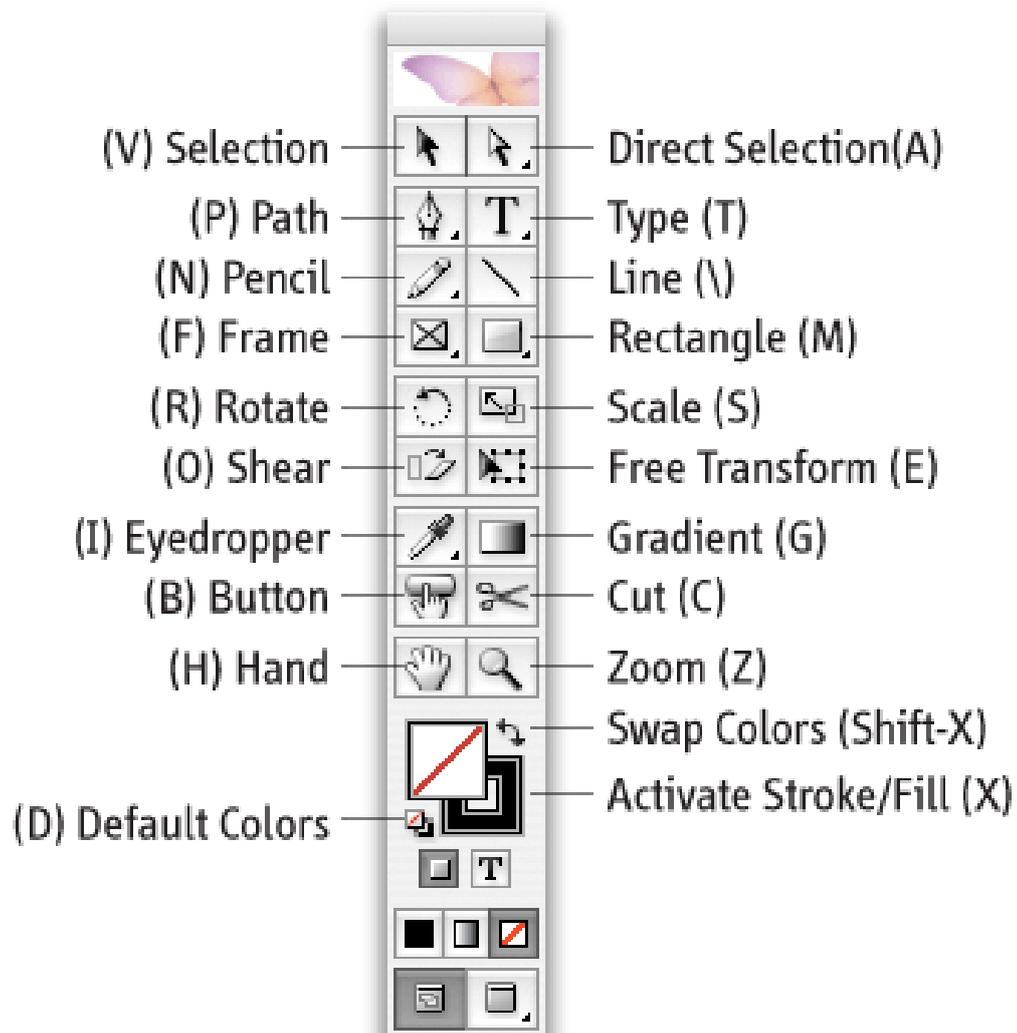
ADOBE INDESIGN

Introduction:

Adobe In design that can be used to create designs is the Adobe indesign. This graphic design software is used primarily in the publishing industry because you can design magazines, info sheets, books, posters, interactive pdfs, brochures, etc. With it. With the 'adjust layout' option that indesign provides, you can change the text of your document, and the graphic will adjust accordingly.

The properties panel has been redesigned to give you more intuitive control over the tools. The Sensei technology integrated into indesign makes the automatic arrangement and resizing of images. Beginners can quickly learn this graphic design software because it has a low learning curve.

Tools:



Selection tool

Direct selection tool

Pen tool

Anchor point tool

Convert direction point tool

Type tool

Type on path tool

Pencil tool

Smooth tool

Erase tool

Line tool

Rectangle frames tool

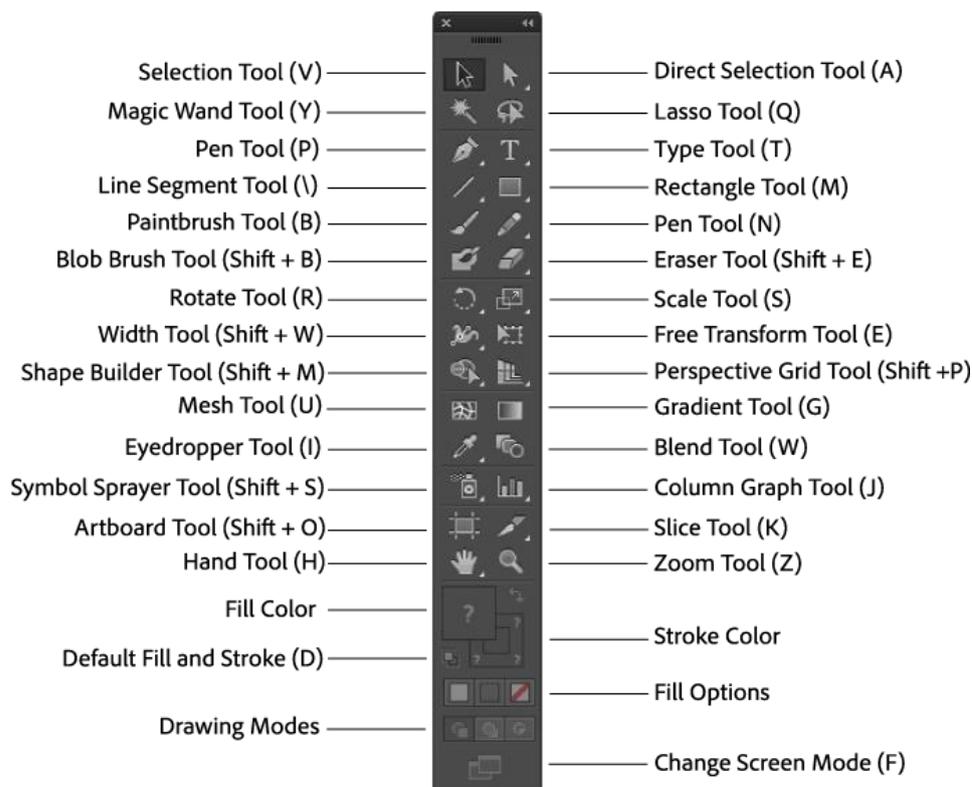
Ellipse frames tool

ADOBE ILLUSTRATOR

Introduction:

Adobe Illustrator is a design software that is centered around vector design. You can create artwork, icons, posters, etc. And the designs created in Adobe Illustrator can be used in business cards or billboards and from smartphones to 8k screens. You can use this software to draw, mix, and refine designs to create something spectacular. Adobe has made a mobile version called Adobe Illustrator Draw, which is one of the best graphic design apps out there.

To draw, you can use the shaper tool and create vector shapes. Geometric shapes can be added to other outlines and can be moved, reshaped, and scaled. Even the fonts in the software can be manipulated according to your needs by adjusting their weight, slant, or width. For beginners, Adobe provides professionally designed templates to save time. The user interface of the program is helpful, but there is a steep learning curve to get good at Illustrator.



Tools:

Selection tool
Direct selection tool
Pen tool
Type tool
Ellipse tool
Rectangle tool
Paint brush tool
Pencil tool
Rotate tool
Scale tool
Free transform tool
Reflect tool
Blend tool
Column Graph tool
Gradient tool
Eye dropper tool
Succors tool
Hand tool
Zoom tool
Fill tool
Stroke tool

QUARK XPRESS

Introduction:

Quarkxpress is an easy-to-use graphic design software that enables you to produce print designs, web designs, layouts, and tables in a fully digital platform. It's ideal for graphic artists, content producers, marketers, and printing businesses. Even if you have no technical knowledge when it comes to editing and designing, you will enjoy its drag-and-drop functionality that makes the entire designing process simple and hassle-free. Quarkxpress is a comprehensive graphic design software that combines the creation of designs, editing of images, and production of illustrations all in one hub. It offers specialized tools for photo editing that also incorporates layers. Quarkxpress is a pioneer when it comes to the provision of intuitive tools for web design. It's the first of its kind to introduce

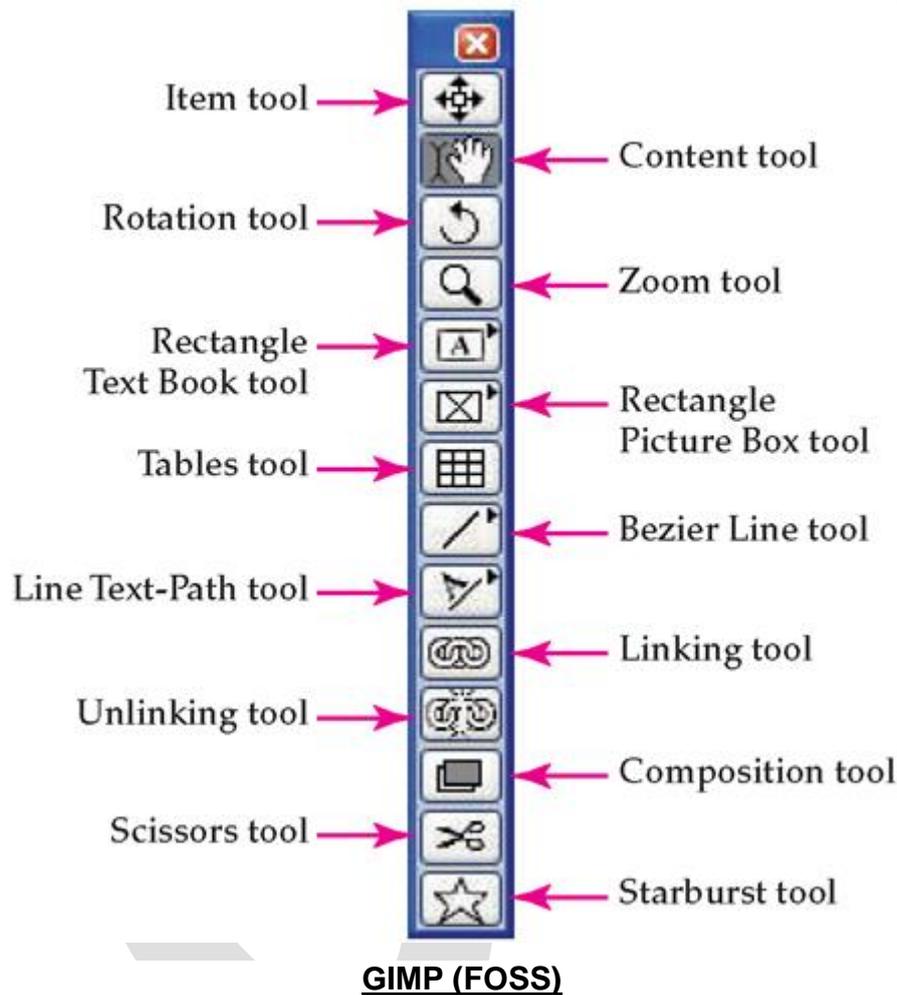
web designing tools that enable users to fully design a website without the need for HTML and CSS codes. Quarkxpress is a highly advanced graphic design software that also has tools for the creation of mobile apps.

Main features of quarkxpress are:

- Page Layout
- Web Design
- Mobile App Creation
- Graphics
- Illustration
- Photo Editing
- Palettes Grouping
- Layers
- Filters
- Digital Publishing
- Tables
- Format Painter
- Smart Guides
- Vector
- Object Browser
- Spine Alignment
- Text & Typography
- Orthogonal Line Tool
- Measurement Palette
- Bulk File Conversion

Tools:

- Item tool
- Content tool
- Rotation tool
- Zoom tool
- Rectangle text box tool
- Rectangle picture tool
- Linking tool
- Unlinking tool
- Scissors tool
- Table tool
- Orthogonal text box tool
- Orthogonal picture box tool



GIMP (FOSS)

GIMP is a free graphic design software that works on many platforms like Windows, Linux, and Mac OS. GIMP is an open-source program that allows you to change its source code and distribute the program. There are many customization programs and 3rd party plugins that can be used in GIMP to improve your productivity and create better designs. GIMP can also be used to retouch images, wherein you can even make creative composites. Interface components and mockups can also be designed, along with print designs such as icons and logos. Platform: Windows, Linux, Mac

Inkscape (FOSS)

Inkscape, like many other platforms, provides multi-purpose use. It can be used by designers, illustrators, or web designers. The software has flexible drawing tools, which make it easy for beginners to understand the software and create art without difficulty. As the text is an integral part of graphic design, Inkscape has a powerful text tool at your disposal. This software is open source and can be used with any platform. A designer has to spend some time understanding how to use this software. This software is best used to

create images that are vector-based and needs to be required in SVG format. Inkscape provides a lot of filters and a helpful community for the designer to grow. Platform: Windows, Linux, and Mac

5.4 - Handling file formats - TIFF, JPEG, PDF, GIF, EPS and PNG.

TIFF – Tagged Image File Format (Raster file format)

TIFF is a lossless raster format that stands for Tagged Image File Format. Because of its extremely high quality, the format is primarily used in photography and desktop publishing. You'll likely encounter TIFF files when you scan a document or take a photo with a professional digital camera. Do note that TIFF files can also be used as a “container” for JPEG images. These files will be much smaller than traditional TIFF files, which are typically very large.

TIFF files are commonly used in desktop publishing, faxing, 3-D applications, and medical imaging applications.

You should use a TIFF when...

You need high-quality print graphics. Along with RAW, TIFF files are among the highest quality graphic formats available. If you're printing photos—especially at enormous sizes—use this format.

You are making a high-quality scan. Using TIFF to scan your documents, photos and artwork will ensure that you have the best original file to work off of.

Don't use at TIFF when...

You're working with web graphics. While many web browsers support it, TIFF files are optimized for print. Go with JPEG or PNG when you need to display high-quality images online.

File extensions: .tiff, .tif

JPEG – Joint Photographic Experts Group (Raster file format)

JPEG is the most common format used by digital cameras and images living on the World Wide Web. This file format is based on lossy compression, meaning that it keeps

information that is visible to the viewer and gets rid of data that the human eye can't perceive. The popularity of the JPEG file stems from the fact that it is lightweight, while still being good enough quality for digital use. Due to its size, it will not only load faster, but it can be uploaded to any platform regardless of size limitations. This format can also be viewed on any device without the need to download a special image viewer. However, it's important to be aware that everytime you save a file as a JPEG, hence compressing it over and over again, it causes the image to lose quality and possibly become pixelated or grainy.

Advantages: lightweight file, viewable on almost any program.

Disadvantages: loses quality when saved multiple times.

Best places to use it: images for web design, social networks, and photo portfolios.

File extensions: [.JPG](#), [.JPEG](#)

PDF – Portable Document Format (Vector file format)

This file format is used for online documents and printing purposes. It was created by Adobe with the goal of displaying files in the same format, no matter what device they are viewed on or what software they are opened with. Thanks to the reliability of PDFs you can create long documents and share them with others without risking a loss to your original design – text is not larger, images are not smaller, etc. PDF files can contain many different elements: text, photos, vector images, videos, audio files and even interactive elements like forms and buttons. It's possible to create this file using many different kinds of software, from Adobe Photoshop, Illustrator, Indesign, and Acrobat to Microsoft Word, Google Docs and more. But to be able to view a PDF, you need to have a PDF reader installed on your device.

Advantages: keeps all formatting regardless of what device it is displayed on.

Disadvantages: you need a PDF Reader installed on the device to view it.

Best places to use it: online forms, documents and printing services.

File extension: .pdf

GIF – Graphics Interchange Format (Raster file format)

The GIF file is a form of bitmap images, meaning the graphic is composed of many tiny parts called pixels, just like the JPEG and PNG file formats. This file type is based on LZW (Lempel-Ziv-Welch), a special form of the lossless data compression algorithm. A GIF is most suitable for storing graphics with a few colors, such as simple diagrams, shapes, and logos, rather than gradients. For example, your business' icons that contain three colors or less look great in this file format – plus, the small file size will be suitable to use anywhere. However, a beautiful sunset picture would not only be too heavy of a file size but also will look distorted because of the color limitations. One benefit of this file type is that it supports a transparent background, like a PNG file.

Advantages: supports transparency and basic animation.

Disadvantages: displays gradient colors poorly.

Best places to use it: short animations for social channels, like Facebook and Twitter.

File extension: [.GIF](#)

EPS – Encapsulated Post Script (Vector file format)

EPS stands for "Encapsulated PostScript." EPS is a PostScript image file format that is compatible with PostScript printers and is often used for transferring files between various graphics applications. As the name implies, EPS files contain PostScript code, which is used for storing font and vector image information. EPS files may also include a rasterized version of the image used for previewing the contents of the file.

File extension: [.EPS](#)

PNG – Portable Network Graphic (Raster file format)

PNG is a high-quality file format used for images. This file type is based on the lossless compression, which means that it supports high-quality images for online use while retaining the original image colors and sharpness. Unlike JPEG files, PNGs also support images with transparent backgrounds. So, if you want to have an image without a background, like a logo or product, you can save it as a PNG file and use it with different backgrounds. However, this file is not as lightweight as a JPEG. Therefore, it's not recommended to upload hundreds of large PNG's to your website or portfolio as it will take

up a lot of storage and ultimately increase the loading time of your site. And nobody has time for that.

Advantages: high-quality files, supports transparent backgrounds.

Disadvantages: heavyweight file (slows down loading time and takes up lots of storage).

Best places to use it: logos, websites photos, social networks (profile pictures, posts, and cover photos)

File extension: [.PNG](#)

VDD sample questions

Unit -1

3 Marks

1. What is the fundamental of Graphic Design?
2. What are the design elements frequently used in designing?
3. Why choosing of format is essential in designing?
4. Define texture and its types?
5. Define color and its role in printing.
6. What are the primary colors of light theory and printing process?
7. What are the design principles adopted in day to day designing?
8. Define balance and its types?
9. How optical centre is decided?
10. What is focal point and how it gets created?
11. What is the principles of unity in designing?
12. What is the principles of proportion in designing?
13. What is the principles of harmony in designing?
14. What is the principles of contrast in designing?
15. What is the principles of rhythm in designing?
16. What is the the principles of balancing in designing?
17. Define Layout and its stages
18. What must be the goal of a designer?
19. Differentiate negative from positive space.
20. Differentiate informal balance from formal balance.
21. How do you create contrast in designing?
22. What is Rough Layout?
23. What is final/comprehensive Layout?

14 Marks

1. Describe the design elements used in designing with sketch.
2. Describe the designs principle to be followed in designing with neat sketch
3. What is layout? And explain its stages with neat sketch
4. Explain the act of balancing in designing and its types with sketch.
5. Describe the factors to be considered before starting of a design?
6. Explain the ways of creating contrast with necessary sketch.

Unit 2

3 Marks

1. What are the measurements followed in typography?
2. What is the “x” height of a type face?
3. What denotes ascender & descender of a type face?
4. Show the stroke and bracket of a type face part.
5. Show the counter & Bowl of a type face part.
6. Show the stem & spine of a type face part?
7. Name few regularly used fonts in book works.
8. Differentiate serif from sanserif type faces?
9. What is decorative typeface.
10. Why initials are used and its type?
11. What is Blackletter? where all used?
12. Define type family.
13. Differentiate type face from font
14. Define type style?
15. What is display type face? Where all it is used?
16. What is true type & open type font?
17. Define readability and legibility
18. Define vector fonts?
19. Define bitmap fonts?
20. Define logo and trademark
21. Differentiate old roman type faces from modern type faces.
22. What is Kerning?

14 Marks

1. Explain the anatomy of typefaces/parts with neat sketch.
2. Describe the measurements to be followed in typography.
3. Explain about readability and legibility and ways to improve it.
4. Explain about vector and bitmap fonts and its application
5. Describe the open type and true type fonts.
6. Explain about the group of type faces with neat sketch.
7. Describe the ways to create Logo and trade mark.

Unit -3

3 Marks

1. What is visible spectrum?
2. What is process color?
3. What is spot color?
4. What is cool color? Give example.
5. What is warm color? Give example.
6. What is tint?
7. What is shade?
8. What is tone?
9. What are the colors human can perceive in visible spectrum?
10. What is the psychological effect of red color?
11. What is the psychological effect of green color?
12. What is the psychological effect of blue color?
13. What is the psychological effect of white color?
14. What is the psychological effect of black color?
15. What is the psychological effect of yellow color?
16. What is color temperature?
17. Define additive color theory?
18. Define subtractive color theory?
19. What is color wheel?
20. What do you mean by complimentary color?
21. State the purpose of color wheel.
22. What are the primary, secondary and tertiary colors?
23. Write the importance of color temperature in printing.
24. Write the psychological effects of cool colors.
25. Write the psychological effects of warm colors.
26. What is color Temperature?

14 Marks

1. Explain about the additive and subtractive color theory with neat sketch.
2. Describe the process color and spot color in detail.
3. Explain all about color wheel and its category with neat sketch.
4. Write about the psychological effects of warm & cool colors.
5. What are the ways to set the working environment for color works?
6. Explain about color spectrum with neat sketch.

Unit -4

3 Marks

1. What is House style?
2. What is grid?
3. What is a template?
4. What is master page?
5. What is style sheet?
6. What is caption?
7. What is folio?
8. What is mimalistic design?
9. Define cropping.
10. Define scaling.
11. Define skewing.
12. Name the available News paper formats.
13. Name the available book formats.
14. Name the available magazine format.
15. Write the necessity of margin in page layout.
16. Write the necessity of guides and columns.
17. Write the necessity of headers and footers.
22. Write short notes on house style work.
23. How you protect the originals?
24. Write brief notes on cropping techniques.
25. Write brief notes on scaling and its method
26. Brief about work and twist imposition.
27. Brief about work and turn imposition.
28. Brief about work and tumble imposition
29. Brief about types of guides.
30. Write short notes on master page.

14 Marks

1. Explain the techniques of cropping and scaling in detail.
2. Explain the layout format of book work.
3. Explain the layout format of newspaper.
4. Explain the layout format of magazine.
5. Explain the importance of grid, master page and margin in page layout work.
6. Describe the minimalastic desin approach with necessary sktch.

Unit -5

03 Marks

1. What is dummy copy?
2. What are the printer's marks used in a printed sheet?
3. What are the printed products made in print industry?
4. What are the designing softwares used in graphic art industry?
5. What is brochure?
6. What is folder?
7. What is leaf let?
8. What are the printed products?
9. Expand TIFF & JPEG.
10. Expand PDF & GIF.
11. Expand EPS & PNG.
12. What are the pagination softwares?
13. What are the image editing softwares?
14. What is vector based software?
15. What is Bitmapped based software?
16. Write down the features of photoshop.
17. Write down the application of Adobe Illustrator.
18. Write down the application of Quark Xpress.
19. Write down the application of Adobe In design.
20. What are the tools used in photoshop?
21. What are the tools used in Quark Xpress?
22. What are the tools used in Adobe illustrator?
23. What are the tools used in Adobe in design?

14 Marks

1. Write the proof reading symbols with its meaning.
2. Explain about any one designing soft wares.
3. Explain the designing of a folders & Brochure.
4. Explain the designing of a book let.
5. Expalin the designing of invitaion & visiting card.
6. Describe the tools and application of Photoshop software.
7. Describe the tools and application of Adobe In design software.
8. Describe the tools and application of Adobe Illustrator software.
9. Describe the tools and application of Quark Xpress software
10. Describe the factors to be considered before print production.
11. Desribe the printers marks used in printing.