

Housing and Interior Decoration



LEARNING OBJECTIVES

After completing the chapter, the student should be able to:

- Describe the importance of house
- Gain information on site selection and principles of organising rooms while planning a house
- Identify activities in the house and space allocation
- Understand the elements and principles of design
- Learn about colour and colour schemes
- Know the types of floor decorations

5.1 Introduction

Housing is one of our basic needs. Home is where our heart lies. Nowadays, the space in the home is of great importance because it is limited. Due to over population, land has become very expensive. Therefore, within less available space, many apartments are constructed to accommodate many families. When we purchase our homes, we need to consider many factors to ensure safety and economy. We have a number of equipment, furniture, furnishings at home and they need to be properly organised and arranged to provide maximum convenience and comfort. To lead a happy, satisfying life, our interiors must have pleasing environment in terms of colour schemes, furniture, furnishings and accessories.

House is a shelter made of floors, walls, windows, roof etc where family members live together and spend maximum part of their life. Housing, next to food and clothing, satisfies one of the basic needs of man. According to National Building Organization a **house** is defined as a **pucca or semi-pucca unit** of dwelling that can accommodate an average household. Its importance is given below:

5.1.1 Importance of house

1. The house protects the family members from excessive cold and heat, wind and rain and from all external anti-social elements.
2. A house is a physical structure consisting of walls, doors, windows, roofs, etc. in which human beings live and seek refuge from tensions and worries of the outside world.
3. The house forms the centre of family life. It is a place where family members are bound together by love and affection and enjoy group living.
4. The house provides space for group and individual activities for the members of the family such as cooking, serving, washing, storage, disposal of waste, recreation, reading and hospitality.
5. The house offers facilities for self-expression and a degree of freedom of action.
6. A good house provides a healthy environment for its members to develop their personality, attitudes, values and a sense of security in addition to rest and privacy.
7. An individual acquires customs, traditions, habits and culture of the family only in the house.
8. House is the place where some family members who cannot support themselves for reasons of sickness, unemployment, old age, widowhood or other handicaps get shelter and care.
9. Housing is the determining factor for the standard of living of a family and act as a status symbol of a family.
10. Housing contributes to national income, national wealth and national employment.

5.1.2 Classification of residential building

Detached house This is an independent house surrounded by its own land on all the sides.	Semi-detached house A common boundary wall to form a structural barrier and divides an independent plot into two units. This helps in achieving economy by sharing expenses on amenities such as water lines, drainage lines, and electric cables.	Row of houses This is preferred for low-income group of families. These rows of houses, have a common wall between two houses, with minimum requirements such as living room, and kitchen.	Apartments or flats This consists of three to seven storeys and each floor or storey may accommodate two or four tenements. The land and other amenities are shared by all the occupants.	Skyscrapers These are multi-storeyed building. This is common in big cities where the price of the land is very high.
--	---	--	---	---

Types of residential buildings

5.1.3 Factors affecting choice of house

The following points should be kept in mind while looking out for a house.

- **Physiological needs:** The house should have adequate ventilation and proper orientation so that there is proper temperature balance, adequate fresh air circulation and light.
- **Psychological needs:** The house should provide privacy and safety.
- **Family size:** A large family with more than six members have to go for a larger house than a small family with four members.
- **Family type:** Families can be classified as nuclear, extended or joint families. The size of the house will vary according to the type of family.
- **Stage of family life cycle:** The stage in which the family is should be considered.

A family in the expanding stage will need a larger house than a family in the beginning or contracting stage.

- **Permanence of residence:** There are two types of family in this regard.
 1. **Transient family** - which has to move from place to place, because of occupational or other needs.
 2. **A Permanent family** - which is reasonably sure of staying in the same place for a long time. This factor should be considered while making decision to rent or own a house.
- **Cost of living:** The cost of living in a particular area should be taken into account while deciding on the locality of the house.
- **Cost of building:** The financial status of the family should be considered while selecting a house.

5.1.4 Owning or renting a house

In general, many families feel that owning a house is far better than renting.

Owning: This is buying a house outright in order to secure its services.		Renting: Rent is the compensation that is paid to the owner, generally in terms of money, by the user for the services of a house, from month to month.
Advantages of Owning		Advantages of Renting
1	People who own a house will feel secure and have a feeling of belongingness.	Renting is cheaper.
2	Can develop long standing friendship with neighbours.	Can change the house according to the needs and income of the family.
3	Become a means of compulsory saving.	Money spent on buying the house can be invested in other business to get more money returns.
4	Can stay in a house for a long period.	No responsibility of maintaining the property.
5	Changes or improvement in the house can be made whenever needed.	Freedom of mobility.
6	Gives a feeling of happiness, pride and sense of security during old age.	Higher living standards can be achieved
7	Credit can be acquired easily.	Can take advantage of different occupational opportunities.
8	It is a good investment.	Gives financial freedom.
9	Have tax benefits.	The family will not get affected if the property value decreases.
10	Better furniture and furnishing can be purchased.	No need to invest on furnishings and furniture as furnished house can be rented.

5.2 Site Selection

Each family attempts to meet its housing needs through the selection of a suitable dwelling unit. The house is undoubtedly the largest single investment you will make in your life. One cannot

change one's residence often. Hence it becomes essential for each one of us to have adequate knowledge about selection of a site and house planning. A site in a good locality should be selected.



5.2.1 Factors to be considered while selecting a site for the construction of a house

i. Physical Features

- a) The site should be regular in shape and should have exact boundaries marked on the land.
- b) A low lying ground is unhealthy because it is capable of causing dampness during rainy season and it becomes a breeding place for flies and mosquitoes.
- c) The site should be on an elevated ground for drainage of water especially during rainy season.
- d) A site on an elevated ground gives wider and brighter view of the house. Site which faces South/North direction is preferable.

ii. Soil Conditions

- a) The best soil is one where soft soil is at the surface and hard soil beneath 3 or 4 ft.
- b) A mixture of sand and gravel is good.
- c) Rocky surfaces afford good foundation, but poses difficulty while levelling or excavating the ground due to its hardness. On rocky surface, laying drainage pipe is very costly. Besides, it is not suitable for growing plants.
- d) Clay and sandy soils are unsuitable because clay surface holds water for a long time and sandy soil absorbs water.

iii. Sanitary Facilities

- a) There should be no stagnant pools or water tanks and unused wells around the site.
- b) The site should not be surrounded by public drainage and toilet.
- c) The site should not be selected near cattle sheds, poultry farm and factories for health reasons.
- d) Reclaimed land filled with debris and refuse is unhealthy for building purposes, as it will give out obnoxious gases. During rainy season it becomes a good breeding place for flies and mosquitoes.
- e) The site should have fresh air, ample lighting and good water supply.
- f) A site in a busy locality may not be suitable for health reasons because of dust and the constant smoke from vehicles.
- g) A site with modern sanitary facilities is the most suitable.

iv. Practical Convenience

- a) The value of the site depends upon the convenience available around it.
- b) The site should be within easy reach to school, market, bank, hospital or nursing home, railway station, bus terminus and post office.

v. Good Neighbourhood

- a) The site should be selected near a developed area for safety.
- b) Good neighbourhood adds to the permanent happiness of the family.

- c) The site in the neighbourhood of a sea commands pleasant sea breeze. But one disadvantage is that sea breeze carries with it a thin spray of salty water, which corrodes all iron articles.

vi. Legal Characteristics

- a) The legal description of the plot and the exact location of the plot must be known.
- b) The site should be a freehold land without encumbrance.
- c) A legal advisor should be consulted, the place surveyed and the boundaries marked on.

5.2.2 Principles of Organising Rooms While Planning a House

The principles to be considered for organising rooms while planning a house are aspect, prospect, privacy, grouping, roominess, furniture requirements, circulation, flexibility, sanitation and practical consideration.

i. Aspect

Aspect is the arrangement of doors and windows on the outside walls of a house which allows good breeze, sunshine and a good view of the nature. Aspect is also needed from hygienic point of view.

- With careful placement of windows, it is possible to admit sun's rays into any desired room. Kitchen should face the eastern side so that the morning sun's rays can purify air.
- Bed rooms should have southern aspect-either southeast or south west to facilitate enjoyment of good breeze.

- The living room can be north-east or south-east in its aspect.

ii. Prospect

It is the impression that the house creates on a person who views it from outside. It must be attractive in appearance, modern, cheerful and comfortable.

- A beautiful window, carved pillars, modern design on the walls and roof may add to the charm of the house.

iii. Privacy

Privacy is of two kinds-privacy of the entire house from the road side; privacy of each room from other rooms and from the entrance.

- Privacy from outside can be gained by planting trees and growing creepers or having a compound wall.
- Privacy within the house can be obtained by proper arrangement of doors and windows.
- Privacy to bedrooms, toilets, water closets and dressing room is of utmost importance.



Principles of organising rooms in a house



iv. Grouping

It is the arrangement of rooms in the house in respect to their relative positions and activities towards each other.

- The dining room close to the kitchen and living room, the living room near veranda, the toilet near bed room and so on.
- Grouping is based on convenience.

v. Roominess

It is the spacious effect a room gives to those who live in. The available space should be fully made use of.

- One can have built in wall cupboard, shelves and storage area so that the floor of the room is left free for various activities.
- The space under the staircase, window sill, area below the ceiling (attic/loft) can be made use of for storage.
- In addition the size and shape of the room, the furniture arrangement as well as the colour scheme used, have a bearing over the roominess of the house.

vi. Furniture Requirement

The rooms must be planned with due thought to the furniture to be placed there.

- The type, the position, size and the number must be planned earlier in respect to the size and placement of doors, windows and built-in cupboards in the room.

vii. Circulation

The circulation from room to room must be good. Good circulation means independent entry to each living space through a common space.

- It should provide privacy to the members and not to disturb any member doing his/her work in the room.
- Straight, short, direct passages must be provided.
- Circulation can be achieved by proper placement of the doors, grouping of the rooms and furniture arrangement.

viii. Flexibility

This means making use of a room originally designed for one purpose, for different purposes at various occasions.

- Converting a living room to a dining hall during function, a back veranda near the kitchen can be used as play centre for children, a dining room converted as child's study centre or play centre are examples.
- Screens, cupboards, folding partitions may help to make a room flexible and serve more than one purpose.

ix. Sanitation

It includes provision of light and ventilation and attention to general cleanliness and sanitary conveniences.

- There should not be any room in a house without enough light.
- Ventilation must be adequate. It means supplying fresh air and evacuating polluted air.
- Opposite windows and doors as well as ventilators must be provided for easy movement of air.
- Sanitary conveniences as provision for drainage of waste water, disposal of refuse and human waste must be planned ahead.

x. Practical Considerations

One may have to take into consideration, while planning the house, the following practical points as **strength, convenience, comfort, simplicity, beauty, possibilities of extending the house in future** and above all **economy**.

5.3 Activities in the House and Space Allocation

A number of activities are carried out at home. Space is required to carry out these activities. Limited space is available for carrying out various activities within home. It is therefore essential to manage space for efficient household work. Some of the household activities and space allocated for them are as follows:

It is sometimes not possible to assign space for these activities. In small houses, a number of activities can be carried out in a particular place for example: Bed room can be used as study or dressing room in absence

Table 1 Activities In The House And Space Allocation

	Household Activities	Space Allotted
1.	Sleeping	Bed room
2.	Cooking food	Kitchen
3.	Eating meals	Dining area
4.	Washing clothes	Laundry area/ bathroom
5.	Washing utensils	Kitchen
6.	Studying	Study room/ Children's room/ bed room/Dining room
7.	Staying of guests	Guest room
8.	Bathing	Bath room
9.	Recreation	Living room

of separate area for these activities. Space management therefore plays a vital role in carrying out different household activities efficiently.



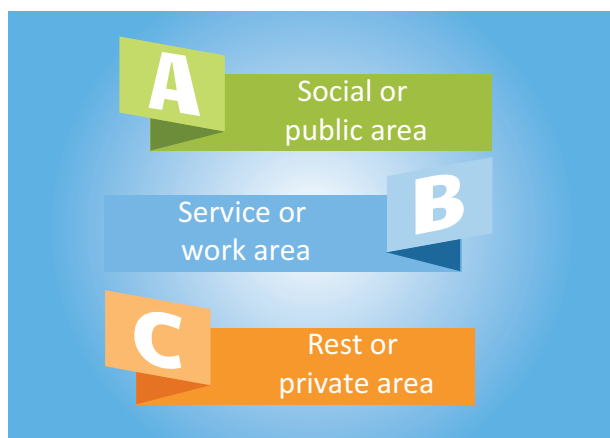
ACTIVITY 1

List the household activities your family members do in each room of your house.

S.No	Living room	Bed room	Study room	Children's room	Kitchen	Bath room	Veranda
1							
2							
3							
4							
5							
6							
7							

5.3.1 Effective Space Allocation in a House

The house and its grounds can be divided into three major areas based on the various activities of the house.



Division of major areas in the house

- 1) **Social or public area** - The rooms allotted are, veranda, living room, reception, dining, music, reception and games room.
- 2) **Service or work area** - The rooms allotted are kitchen, serving, laundry, drying yard, ironing room, garage, storage areas, office and study room.
- 3) **Rest or private area** - Bedroom, dressing room, bathrooms, prayer room etc. It is not possible to allot room for each and every activity separately, but it is important to allot spaces for the more important ones.

5.3.2 Rooms in the House

The rooms in the house and various activities carried out there are discussed in the following paragraphs:

A veranda serves many purposes. It is a place for stranger or a visitor to wait. It

is a place for keeping shoes, walking sticks, umbrellas and a place to store vehicles. It provides place for business, the postman, the newspaper boy, milkman, and the vendors to call on the family members at the entrance. It serves as a passage to other rooms of the house. It protects the walls of the house from the direct rays of the sun. It is a place for pets and also a place for growing plants.

The Back Veranda/ Balcony

It serves different functions such as grinding, drying clothes etc. A veranda/ balcony facing south or west is comfortable.

Living Room

Living room is placed adjacent to veranda. The living room should provide place for many of the family activities as reading, conversation, get together, indoor games and light music. It is a place to receive friends and also to hold social functions. In a small house, it can serve as a study room for children, sleeping area for one or two members. It can be a dining room during special occasions. At times it can accommodate guests. Thus it may serve multi various functions, depending upon the type of the family. A living room should express cordial welcome to the friends of the family. The furniture and furnishing that are used in the living room must be comfortable and suitable for the room. **For example,**

Conversation	-	Sofa, chairs
Hospitality	-	Centre coffee table
Reading	-	Table, chairs and bookcase
Recreation	-	Radio and television cabinet, table and chairs



There should be enough wall space for hanging pictures and for display of decorative articles. Flower arrangements add beauty to the room. A shelf may be provided for art objects.

Bed Room

A bed room is included under the private area of the house. It is used for sleeping, relaxing and studying. It can provide place for dressing and storage of clothes. An individual spends about one third of her/his day in a bed room. Therefore, it is important to plan the bed room efficiently. Bed rooms should not be located around the busy area of the house such as kitchen.

A rectangular room is more convenient than a square one. Ventilation is of utmost importance in bedroom. It should be on the side of the direction of prevailing wind. The door of the bedroom should be located in such a way that when opened the bed is not visible fully. Bathroom attached to a bedroom would add to the convenience of the family members. Adequate storage space should be provided in the bedroom. Built-in cupboards for clothes and bed linen save space. A chest of drawers could also be provided. A small table and a chair may find a place to keep some of the books for light reading, table lamp, and flower arrangements etc.

Children's Room

As children grow up they need a separate room for studying, playing etc. children's room should be planned wisely. Bunk beds (beds one above the other) can also be provided to save space.

- Furniture with sharp edges should be avoided in children's room. The height of the furniture such as bed, chair, table etc, should be low and it should be light weighted.
- The storage cupboards should be low in height for easy accessibility by the children.

Kitchen

Kitchen can be aptly described as the hub of the home. It is the nucleus of the house, a place where we cook food, store our food, utensils and provisions. It can provide space for eating too. The comfort, health and happiness of the family mainly depends on the activities carried out in the kitchen. Kitchen should well lit and ventilated and should never be a suffocating chamber of pungent smoke irritating the eyes, nose, and lungs of the housewife. Kitchen should have chimney/exhaust fan to exhaust smoke and fumes out of the kitchen. The floor of the kitchen should be selected properly so that it is easy to clean. It is very essential that one gives enough thought to the kitchen arrangements.

- Location:** The best location will be eastern or north-eastern corner of the house. This is helpful in having purified air and also warmth in the morning and coolness during the other part of the day.
- Size and shape:** For actual efficiency the kitchen should be neither too small nor too large. A rectangular kitchen is step saving.
- Activities and work centres:** The main activities in the kitchen are food preparation, cooking and cleaning of food items and equipment. The

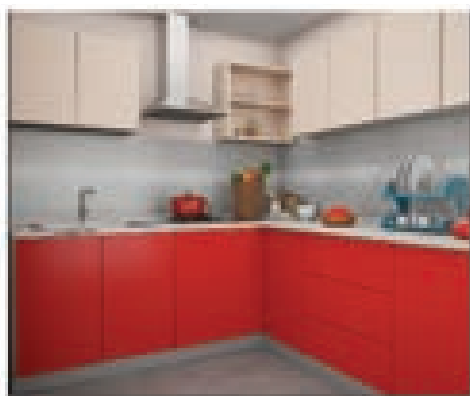


work area for these three activities should be carefully planned. The kitchen should have the preparation, cooking and washing centres adjoining each other at comfortable heights to form a triangle. This work triangle ensures convenience and safety.

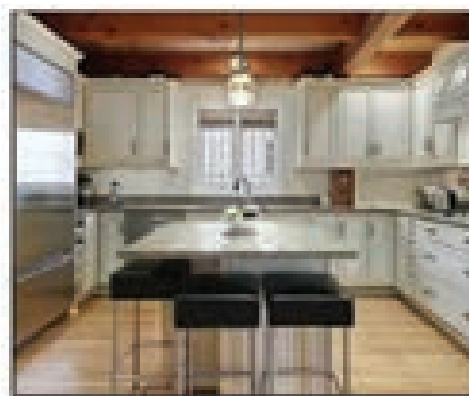
- The various shapes in which the major work centres can be arranged are 'U' shaped, 'L' shaped, one wall and parallel walls. The ideal shape for the kitchen arrangement is 'U'. It consists of preparation and cooking centres on either side and the cleaning centre in the middle. This is a compact arrangement and labour saving too. In the 'L' shaped kitchen arrangement of the work centres are placed on two adjoining walls. The one wall and

two wall arrangements are suitable for small kitchens.

- **Cooking centre:** The range with the storage of utensils needed for cooking occupied an important place in the kitchen. A peg board for frying pans and sauce pans, a holder for knives and spoons and all the food items and equipment must be placed within easy reach in the cooking centre. The main appliance in this area is a gas burner or stove. The gas burner or stove is placed on top of the counter at an appropriate height to carry out cooking.
- **Washing centre:** Washing area should be near the cooking area. It should have proper arrangement for water and proper drainage system. Storage cupboard for



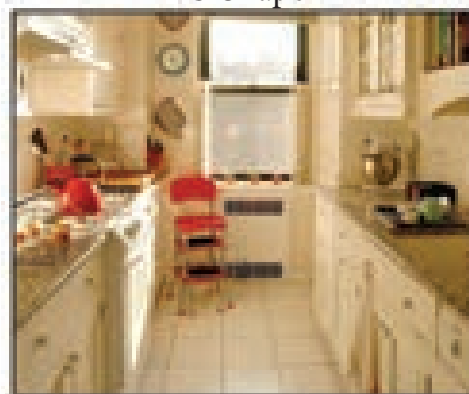
L-Shape



U Shape



One wall



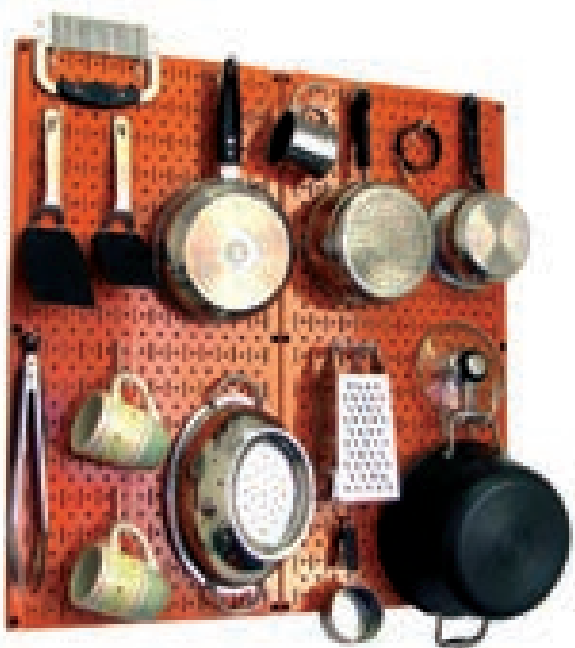
Two wall

Kitchen types



dishcloth and brushes can be hung in convenient place provided there. Sink should always be placed in front of a window. Garbage pail should be kept near or under the sink.

- **Preparation centre:** Placement of a refrigerator in the preparation centre facilitates easy handling of vegetable, milk, egg and fruits during preparation. The equipment like blenders, beaters, sifters, saucepans, measuring cups, spoons, knives, and ladles should be stored here. This area should have adequate electrical points to use various appliances.
- **Storage facilities in the kitchen:** Built-in cupboard or cupboard with drawers and rack can be provided. Care should be taken to avoid insects. The wall area above and below the counter should be fully used.



Peg board

Bathroom

The purpose of a bathroom is to provide facilities for bathing, washing and dressing too. The main bathroom should be in the ground floor not far away from the main rooms. It can be attached to the bedroom for convenience. There should be good ventilation in the bathroom. A window at the usual level with frosted glass shutters, admitting light but keeping privacy, is good. Loft can be provided to store things if necessary. Small built-in shelf may be used for keeping oil, soap, brush, paste, etc. The flooring finish should be easy to clean. It should never be slippery. The wall should have a polished surface to a height of 90cms from the floor. There should be good drainage facilities for removal of waste water from the bathroom.

Storage

Successful housing needs the provision of adequate storage facilities throughout the various parts of the house. Good storage facility with closed doors is needed for the following reasons.

- Gives a neat and orderly background for a family living.
- Avoids unnecessary waste of time and energy.
- To have easy access to things.
- To have maximum use of space allotted.
- To preserve and protect the things against mice, flies, ants etc.
- To keep things away from dust, sunlight, moisture, obnoxious gases and adverse temperature.
- To prevent pilferages.
- To keep things out of reach of children.



Some of the things in the house that need to be stored are clothing, bedding, food supplies, kitchen equipment, sports equipment, garden and yard tools, cleaning agents, cleaning equipment, books, medicines, disinfectants and recreational equipment. Provision for storage in a house can be made in lofts, shelves and built in cupboards.

The following points should be kept in mind when planning storage.

1. Store materials and equipment near the place of work.
2. Store materials at proper heights to avoid unnecessary stooping and stretching.
3. Arrange articles properly.
4. Group articles of similar nature together.
5. Label the items stored.

5.4 Interior Decoration

Decoration aims at beauty, functionalism and expressiveness. Beauty is a quality which is pleasing to the eye and ear, functionalism represent usefulness, whereas expressiveness indicate definite idea or theme. The ideas expressed in a house are warmth, coolness, sophistication, intimacy, naturalness and delicacy.

A house constructed with floors, walls, and roof can be made to look attractive and comfortable by decorating its interior tastefully. When our home looks beautiful, we feel happy and satisfied. “A thing of beauty is a joy forever”. All of us enjoy beautiful things be it our possessions or surroundings. One’s imagination, good taste and aesthetic sense are very much needed to have a beautiful and functionally useful interior.

Interior decoration is a creative art of adjusting the space and equipment to suit the fundamental and cultural needs of the inhabitants. Use of colours and accessories is one of the key ways of decorating the house. Proper selection and arrangement of accessories and colours helps in interior decoration of the house. Accessories such as curtains, lamps, carpets, upholstery, flower vases, potted plants and other art objects like statues etc. can be used in interior decoration. Designs in the art objects make them individualistic and beautiful.

Design

Design is selecting and arranging of materials with two aims – order and beauty. In which, the order denote structure and beauty show character through the interpretation of an idea by an individual. While creating the design in this way, the designer express various ideas, moods and values and such expressions evoke some response in the minds of the viewers. Design can thus be defined as the selection and arrangement of elements of art such as lines, form, colour and texture of an object or a drawing of it on a piece of paper. A good design shows an orderly arrangement of the materials and creates beauty in the finished product.

There are general characteristics found in beautiful art objects that establish certain principles. Any piece of art that satisfies these principles is always admired by all. One should have the knowledge of the principles fundamental to good taste. Based on this, one can identify and appreciate beauty in art objects. Now let us deal with the elements of art.

Design can be classified into two types.

DESIGN	
Structural design Structural design is the design made by the size, form, colour and texture of an object. Structural design is essential to every object.	Decorative design Decorative design is the surface enrichment of a structural design. This adds luxury to a design.
Requirements of a good structural design	Requirements of a good decorative design
1. It should be simple and beautiful.	The decoration should be in moderation.
2. It should be suited to its purpose. It should strengthen the shape of the object.	The decoration should be placed at structural points. It should strengthen the shape of the object.
3. It should be well proportioned.	There should be enough background space to give an effect of simplicity and dignity to the design.
4. It should be suited to the material of which it is made.	Surface patterns should cover the surface quality.
5. It should have originality.	Designs, based on their source can be classified into natural, geometric and abstract designs.



5.5 Elements of art

Elements of art are parts of a work of art that can be defined. These elements are the building blocks of a design. All art work is created by combining the elements of art guided by principles of design. Elements and principles of design are foundation of all visual matter.

The elements of art are as follows:

1. Line
2. Shape and form
3. Texture
4. Space
5. Colour

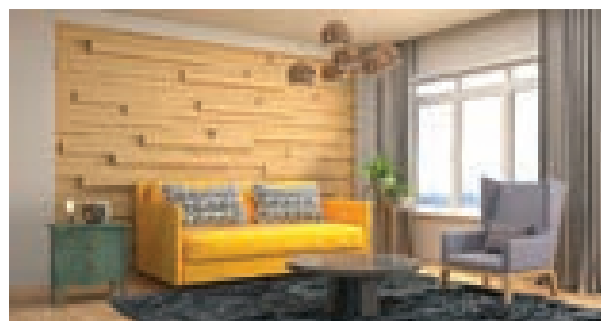
5.5.1 Line

Line is the basic element of art. It is a series of points joined together in two-dimensional form. It has length but no

width. Line is capable of communicating emotion, movement, direction, growth and states of mind through its character.

Types of lines

- Horizontal lines:** Horizontal lines suggest a feeling of rest and repose. It also creates the effect of width as they carry eye from left to right or vice versa and make objects appear broad and fat.



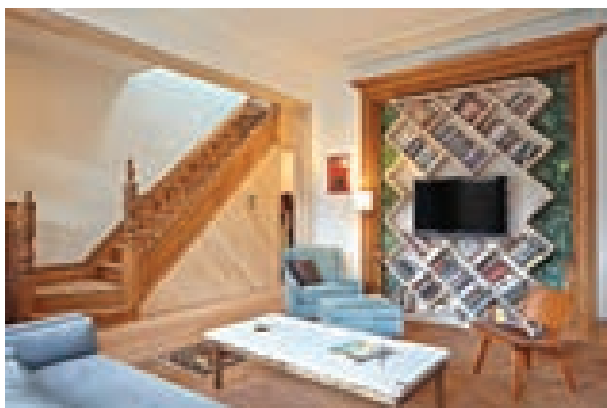
- Vertical lines:** Vertical lines are associated with upright position



of human body which signifies alertness and stability. Vertical lines communicate a sense of height. They also suggest the feelings of strength, regularity, loftiness, spirituality and action. They move the gaze from top to bottom or vice versa.



- iii. **Diagonal lines:** Diagonal lines suggest a feeling of movement or direction, restlessness and excitement. They also suggest lack of stability. Diagonal lines are associated with running posture and signifies action and movement.



- iv. **Curved lines:** There are two types of curved lines.
- a) **Soft shallow curved lines:** Soft shallow curved lines suggest grace, joyful feelings, comfort, safety, familiarity and relaxation.



- b) **Deep acute curved lines:** Deep acute curved lines suggest confusion, turbulence, even frenzy.



5.5.2 Shape and forms

Shape is an area enclosed by lines. Shapes are flat and generally considered two dimensional. Basic shapes are rectangles, squares, triangles and circles. **Form** is the organization of visual elements in three dimensions. In addition to height / length and width, form also has actual depth or illusion of depth. Basic forms are spheres, cubes and cones.



Types of shapes and forms

- i. **Naturalistic shapes/forms:** Naturalistic shapes or forms are found in nature and are irregular or asymmetrical forms such as mountains, flowers. Man-made objects may also imitate the naturalistic shapes.



- ii. **Abstract shapes/forms:** Abstract shapes or forms are stylized or simplified versions of natural shapes/forms. Abstract shapes are usually used to convey meaning or identity without the use of written language. Many signs, icons and logos found in advertisements, posters use abstract shapes and forms.



- iii. **Geometric shapes/ forms:** These correspond to mathematically shapes and forms such as circles, squares, cubes, cylinders and cones etc.



5.5.3 Space

It is the area around, between, above, below or within object. Space can be two-dimensional as well as three dimensional. Two dimensional space has only height and width whereas three-dimensional space also has a depth.

Implications of space

- Large spaces without boundary give a feeling of being exposed and lonely.
- Small spaces may lend a feeling of protection and privacy.
- Space be judiciously used in design for best impact.
- Too much empty space is as bad as too little space.

5.5.4 Texture

Texture refers to the tactile quality of an object which may be felt by touch or may be identified through visual examination. The different kinds of texture are furry, fuzzy, satiny, silky and rough. Texture helps in adding beautification to the objects. Textures are very important in designing any artwork as it helps in creating emphasis or unity between different components.



Texture can be of two types:

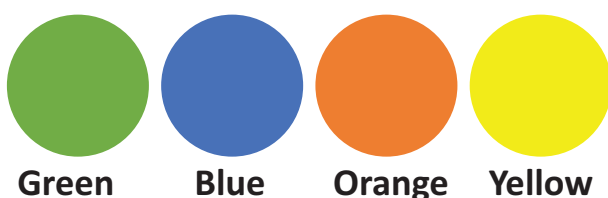
1. Visual texture is what you see through sight.
2. Actual/tactile texture is what you can feel by you.

Effects of texture

1. Rough textures suggest informality.
2. Smooth textures suggest formality.
3. Textures are helpful to create emphasis, harmony or separation between parts of a whole.

5.5.5 Colour

Colour is an important element of art. It is defined as the impression formed by the mind according to stimulations of the retina. Objects in the environment absorb certain wavelengths of light and reflect back others, the reflected wavelengths enter the eye, act upon the optic nerves cause sensation of light and colour. Light waves with different wavelengths produce different sensations and appear as different colours.



5.6 Principles of Design

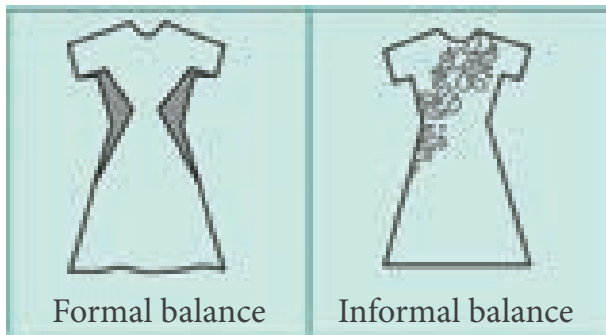
The principles are concepts used to organize or arrange the structural elements of design. The principles of design help in determining whether an object is aesthetically good or poor. They are just guidelines in creating an effective art work or design. The principles of design are as follows.

1. Balance
2. Proportion
3. Rhythm
4. Emphasis
5. Harmony or unity

5.6.1 Balance

Balance is **equalization of attraction on both sides of the centre**. It is rest or repose. Balance is the fundamental principle of design. Balance is the arrangement of elements so that all is equalized. Visually all the weight is equal and no part dominates completely. It is a way to compare the right and left side of a composition. The placement of elements of design should be in such a way so as to make them look appealing on a particular space. Balance can be of three types:

- a) Formal balance
- b) Informal balance
- c) Radial balance



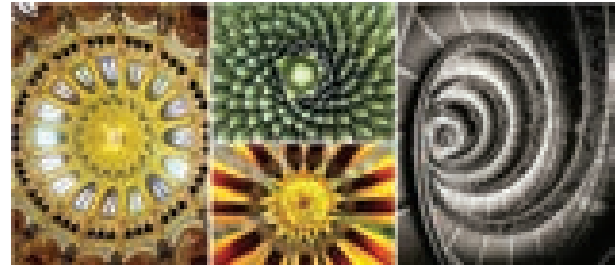
- a) **Formal balance:** Symmetrical or formal balance is referred to as when sides of a composition from a centre/focal point, are similar in visual weight and almost mirror. Formal balance gives a sense of formality, stiffness, precision, exactness and carefulness.



- b) **Informal balance:** Informal balance is achieved when both sides of a composition from centre/focal point, are dissimilar in visual weight and also not mirrored. Informal balance is more subtle, casual, dynamic, active and suggest informality and flexibility.

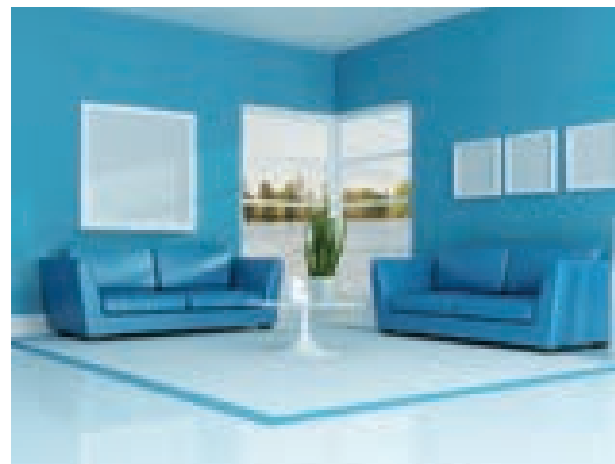


- c) **Radial Balance:** Radial balance is obtained by arranging elements equally around a central/focal point.



5.6.2 Proportion and scale

Proportion is the feeling of unity created when all parts relate well with each other. Proportion means **the relationship of sizes or areas to one another or to a whole**. The principle of proportion is sometimes called 'the law of relationships'. It also refers to the relative size and scale of the various elements in a design. Proportion is achieved when the different sizes of objects are successfully grouped in an arrangement the elements making up the structure having a pleasing relationship for the whole and to one another. For example, a very small sofa would be 'out of scale' in a very large room.



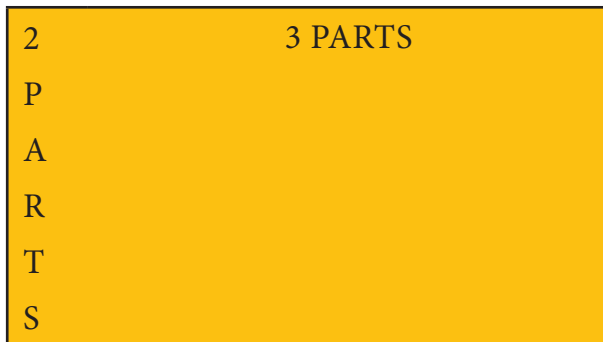
REMEMBER

Scale refers to the size of an object.

Proportion is part of an object in relation to whole.

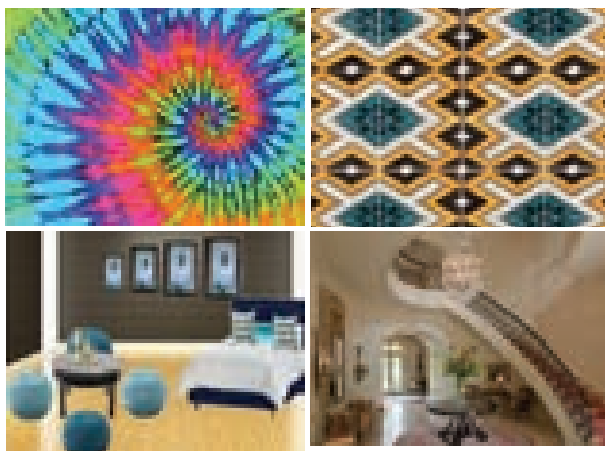


Greek oblong or Golden Oblong refers to proportions of parts to one another and to the whole. Golden section is a standard of good proportion and divides the space interestingly. This oblong uses the ratio of 2:3 or 3:5 in case of flat surfaces and 5:7:11 in case of solids.



5.6.3 Rhythm

Rhythm is **organized movement in continuity**. It is one of the fundamental principles in any design. Rhythm is created when one or more elements such as colours, shapes, forms and size are used repeatedly to create a feeling of organized movement. Variety is essential to keep rhythm exciting and active and moving the viewer around the artwork. If a piece has a rhythm the work should flow freely without interruption. Rhythm can be achieved through four ways. They are **continuous line, repetition, progression of sizes/gradation and radiation**.



5.6.4 Emphasis

Emphasis is the **art principle by which the eye is carried first to the most important thing in any arrangement and from that point to every other detail in order of importance**. Emphasis is the part of the design that catches the viewer's attention. In a particular composition, there are things which the artist wishes to highlight and these things should dominate, whereas there are other things which play just a supportive role and hence should not be emphasized. By emphasis one can stress important parts of an artwork.



Emphasis can be created by various ways.

- It can be done by using different colour, size, texture and shape.
- Another way of creating emphasis is by the use of decoration, contrasting colour, by grouping objects, by placing things with sufficient space as background.
- Emphasis can also be created by making a focal point.



5.6.5 Harmony or unity

Harmony is the fundamental requirement of any piece of work. It means a single idea or impression. All objects in a group have a 'family resemblance or friendliness'. Unity is the feeling of harmony between all parts of the artwork creating a sense of completeness. It is used to create a feeling of completeness where everything flows together. **According to Goldstein and Goldstein V., Harmony is the art principle which produces a feeling of unity through the selection and arrangement of consistent objects and ideas. One element should merge with another in terms of line, shape, form, colour, idea, texture etc. Unity can be achieved through the effective and consistent use of above mentioned elements.** Pattern is the most fundamental element for a strong sense of unity.



5.7 Colour and Colour Schemes

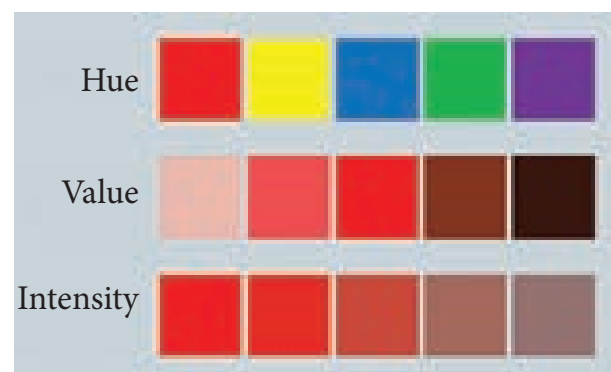
Colour is an inherent visual property of all forms. It is an essential part of our environmental settings. The colours we attribute to objects, however, find their source in the light that illuminates and reveals form and space. Without light, colour does not exist.

When white light falls on an opaque object, selective absorption occurs. The surface of the object absorbs certain wavelengths of light and reflects others. Our eyes pick up the colour of the reflected light as the colour of the object. Pigmentation of a surface determines which wavelengths or bands of light are to be absorbed and which are reflected as object colour. For example, a red surface appears red because it absorbs most of the blue and green light falling on it and reflects the red part of the spectrum, similarly, a black surface absorbs the entire spectrum, and white surface reflects all of it. This distribution of colour in light rays is reflected as a rainbow on a rainy day when the light ray passes through a water droplet, which acts as a prism.

5.7.1 Dimensions of colour

There are three properties or qualities which may be called the dimension of colour, and which are just as distinct from one another as the length, breadth, and thickness of an object. All three of these dimensions-hue, value and intensity-are present in every colour, just as every object has length and breadth and thickness.

These colour dimensions are Hue, Value, and Intensity or chroma.





DIMENSIONS OF COLOUR

HUE	VALUE	INTENSITY / CHROMA
<ul style="list-style-type: none">● Hue refers to the name of the colour such as red, yellow and blue and it describe the kind of colour and also represents the difference between the colours.● The hues or colours can be divided into warm and cool colours. The colours that have more of yellow, red are considered to be warm colours as they represent the colours of fire, sun and heat.● The colours which have more of blue are considered to be cool colours as they represent the sky and water.● Warm colours make the objects appear bigger and closer where as cool colours make the objects appear smaller and far away.● Warm colours are cheerful and stimulating where as cool colours are calm and restful.● Advancing colours such as yellow, red are those that tend to advance towards one by reducing the distance.● The advanced colours make the room smaller.● Receding colours are those that tend to recede or go back by increasing distance and make the room larger.	<ul style="list-style-type: none">● It indicates the lightness or darkness of a colour in relation to white or black.● Light values are called tints and dark values are called shades.● Tints are made by addition of white and shades are made by addition of black.● The lightness and heaviness are given by the use of the different colours.● Red and yellow seem to be heavy colours while blue or purple are considered to be light colours.● Heavy colours are used at the lower part of the room and light colours are used on the upper side of the room.● Light values increase the size of the rooms/ objects and dark values reduce the size.	<ul style="list-style-type: none">● It refers to the brightness or dullness of a colour.● It also refers to the degree of purity or saturation of a colour with respect to grey.● It can be said it is the property describing the distance of the colour from grey or neutrality line. e.g as in the case of the lemon which is brighter than the banana though both of them are of the same colour.● A colour in its purest form has the greatest brilliance or intensity.● Adding more of hue strengthens the intensity, adding grey or complementary colour lowers it. Hues that are neutralized or greyed are called tones.● Warm colours like yellow, orange and red with high intensities are stimulating, visually active and therefore should be used in small areas.● Cool colours like blue, purple and green with low intensities are subdued and relaxing, can be enjoyed in large areas.



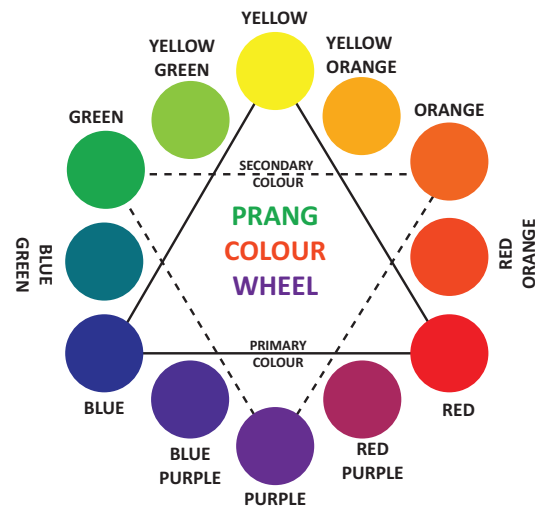
Case Study

1. Sharmila's study room looks small. The walls are painted with dark purple colour paint. What change can she do to make that room look bigger?
2. In Raji's house, the living room is too narrow and long. How can she make the room to look approximately square?

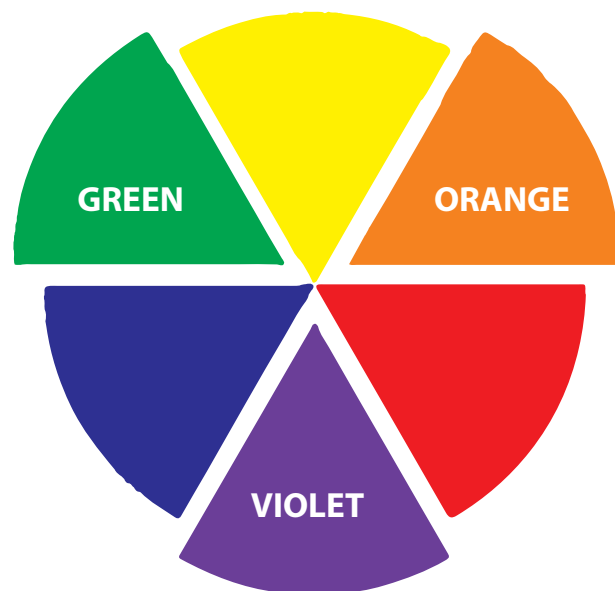
Answers

1. The walls can be painted with light colours as they give the feeling of spaciousness e.g banana yellow, light pink etc.
2. The two narrow walls in the living room can be painted with light value colours to make them recede/go back, while other two walls can be painted with full bright intensities to advance. Thereby making the room look like a square room.

use of pigment. They are the only hues in pigment that cannot be obtained by mixing other hues.



2. **Secondary colours:** When two primary colours are mixed in equal proportions, we get secondary colours.



5.7.2 Classification of colours-Prang colour chart

In the Prang System, colours may be divided into five classes: Primary, secondary, intermediate, tertiary and quaternary.

1. **Primary colours:** All colours may be obtained by mixing in various proportions three fundamental hues: red (R), Yellow (Y), and blue (B). These are called the three primary colours, because they are the elements in the

Yellow + Blue = Green.

Blue + Red = Violet or Purple.

Red + Yellow = Orange

The primary and secondary colours together are called **basic colours**.



- 3. Intermediate Colours:** When a primary and an adjacent secondary colour is mixed an intermediate colour is produced. There are six intermediate colours. They are

Yellow + Green = Yellow Green.

Blue + Green = Blue Green.

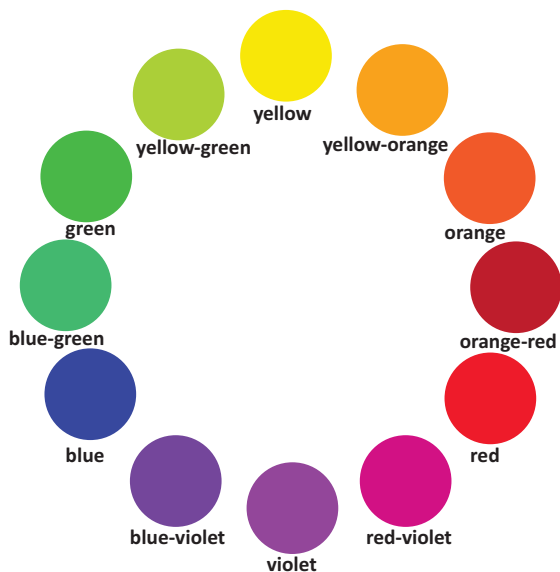
Blue + Violet = Blue Violet

Red + Violet = Red Violet

Red + Orange = Red Orange

Yellow + Orange = Yellow Orange.

The three primary colours, three secondary colours and six intermediate colours form the outer circle of the Prang colour chart.



- 4. Tertiary Colours:** When two secondary colours are mixed a tertiary colour is produced.

There are three tertiary colours. They are

Green + Orange = Grey Yellow or Smoky Yellow.

Orange + Violet = Grey Red or Old brick Red.

Green + Violet = Grey Blue or Slate Blue.

- 5. Quaternary Colours:** When two tertiary colours are mixed a quaternary colour is produced. There are three quaternary colours. They are

Smoky Yellow + Old Brick Red = Grey Orange or Buff.

Smoky Yellow + Slate Blue = Grey Green or Olive Green

Old Brick Red + Slate Blue = Grey Violet or Prune.



ACTIVITY 2

Take red colour pencil and yellow colour pencil and fill up the circles. In the third circle apply both red and yellow colours at the same time in equal proportion and see the colour change. For the second one, take red and blue colour pencils and apply simultaneously in the third circle. (Answer: Refer Classification of colours-Prang colour chart-Secondary colours)

1. Red + Yellow = ?



2. Red + Blue = ?





The three tertiary and three quaternary colours form the inner circle of the prang colour chart. Grey colour is in the centre of the Prang colour chart.

5.7.3 Colour Harmonies/ Schemes

Harmony can be defined as a pleasing arrangement of various parts in to a complete one. In visual experiences, harmony is something that is pleasing to the eye. It engages the viewer and it creates an inner sense of order, a balance in the visual experience. Colour harmony delivers visual interest and a sense of order. Colour combination or colour harmonies can be classified into related and contrasting colour harmonies.



1. Related colour harmony: They are obtained by using colours which are similar. They are classified into **monochromatic and analogous** colour harmony.

i. Monochromatic colour harmony:

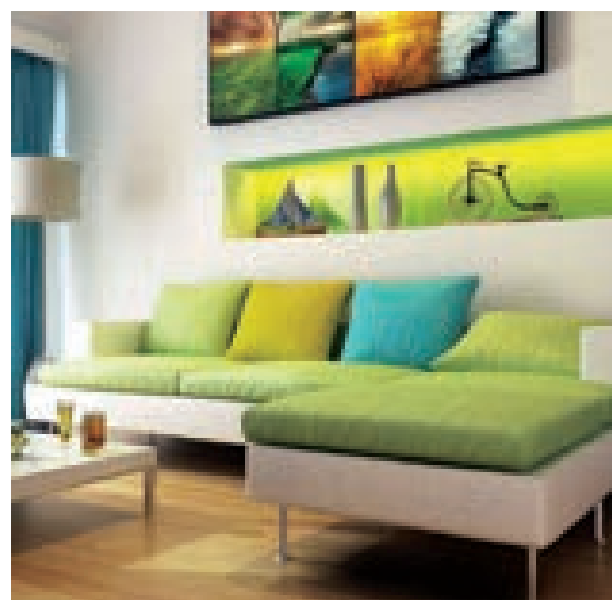
- a)** This is also known as one hue colour harmony. It involves use of tints, shades and tones of the same hue. Example: yellow.
- b)** In a monochromatic colour scheme, charming effects can be obtained through contrast in textures of the materials used.
- c)** **Neutral colours such as white, black and grey** can be integrated into the colour scheme.

- d)** It results in less vibrant colour scheme compared to other harmonies.



ii. Analogous colour harmony:

- a)** In this colour scheme the colours which are lying adjacent to each other in the prang colour chart are used.
- b)** They provide interesting variety than monochromatic harmony.



Yellow, yellow green and green Orange.
Yellow orange, yellow



- c) The colours should be of different intensities and values. Examples: Red, Red Orange, Orange.
- d) One colour is used as dominant while others are used to enrich the scheme.
- e) It is used widely in creating art work.

2. **Contrasting colour harmonies:**

Contrasting colour schemes are based on opposing colours and tend to be stimulating and balanced because they include both warm and cool colours.

i. **Complementary colour scheme:**

- a) Two colours that are directly opposite in the Prang colour chart are combined. Example: Yellow and Violet, Blue and Orange.
- b) In this colour scheme, one colour should be dominant, other colour should be used as the subordinate colour.
- c) This scheme makes use of one warm and one cool colour.
- d) High degree of contrast in this scheme makes it striking drawing maximum attention.



Blue and orange



Red, red orange, blue green and green

ii. **Double complementary colour harmony:**

- a) Two adjacent colours and their opposite colours in the Prang colour chart are combined. For example: Yellow, Yellow Green, Violet and Red Violet.
- b) In this colour scheme, one colour should be dominant, other colours should be used as the subordinate colours.
- c) Attention should be given to balance between warm and cool colours.

iii. **Split complementary colour harmony:**

- a) In this scheme, one dominant colour and two subordinate colours that lie on either side of its complementary colour are combined. For example: Yellow, Blue Purple and Red Purple.
- b) Due to the contrast, this colour scheme is attention seeking.



Orange, purple and blue green

3. Triad colour harmony:

- a) In this, three colours which are at equal distance in the Prang colour chart are combined.
- b) It is a rich colour scheme which offers plenty of possibilities for variations.
- c) Utmost care is required to balance the colours in a pleasing triadic colour harmony.



Secondary Triad - Green, Orange and Violet

- d) We get four triads namely primary, secondary and two intermediate triads.

Primary Triad - Yellow, Blue and Red.

Secondary Triad - Green, Orange and Violet.

Intermediate Triad

- a) Blue Green, Red Purple and Yellow Orange
- b) Yellow Green, Blue Purple and Red Orange.



ACTIVITY 3

Match the following

1.	Analogous	three colours which are at equal distance
2.	Monochromatic	Directly opposite hues
3.	Complementary	Hues lying adjacent
4.	Double complementary	one dominant colour and two subordinate colours either side of its complementary colour
5.	Split complementary	Two adjacent colours and their opposite colours
6.	Triad	Four hues equidistant
7.	Tetrad	One hue



Green, Yellow Orange, Red and Blue Purple

4. Tetrad colour harmony:

- a) This is formed by any four hues equidistant on the Prang colour chart. Example: Green, Yellow Orange, Red and Blue Purple.
- b) It works best if one colour is dominant
- c) Attention is to be paid to the balance between warm and cool colours in the design.

5.7.4 Factors to be considered while planning colour scheme

The following points must be taken into consideration while planning colour scheme for the interiors.

- The expected effect in size, shape and direction of the room.
- The mood to be created in the room. Example: Masculine, feminine, traditional, formal, etc.
- Individual preference of the family members.
- The activities to be carried out in each room.

- Colours of other existing furniture and furnishings in the house.
- **Only one colour should dominate.**
- The basic colour should occupy at least 60-70% of the whole colour scheme. Second hue should be used in lesser quantity and if a third colour is used, it should be used in least quantity.
- Follow 'Law of areas' that is, **larger the area lighter the colour and smaller the area brighter the colour.**
- The current trends and fashions.

5.8 Flower Arrangement

Flowers are nature's gift to mankind. Flowers are artistically arranged along with other plant materials in receptacles and organized into compositions having harmony of form, texture and colour. Flowers brightens up any room in the house and provide variety and interest. Flower arrangements are used at various locations such as tables, window sills, walls and corners to suit the space and occasions.

5.8.1 Materials used in flower arrangement

There are three basic materials are needed for creating flower arrangements:

1. Flowers, foliage, fruits and berries
2. Vases/containers
3. Stem holders, knife, scissors and wire

1. Flowers, foliage, fruits and berries:

Any kind of flowers, foliage, fresh, dry or artificial ones can be used in this art.



Selection and preservation of flowers

1. Flowers should be collected either early morning or evening.
2. Select buds or flowers just blossoming than flowers in full bloom. These flowers are liable to shed their petals or droop and wither fast in a short period.
3. The stems should not be broken with the hand. It should be cut with scissors or a sharp knife. The stem should be as long as possible.
4. The cut portion of the stem should be immersed in water. Only the petals of the flowers should be exposed.
5. The leaves close to the base of the stem should be removed.
6. The flowers should be wrapped either in a piece of paper or a broad leaf, such as the banana leaf, above the stem ends and stored in dark corner of a room in a bucket of water, to protect them from sunlight. If they are not going to be used soon, polythene covers may also be used to cover the cut flowers.
7. The container or the vase should be filled with warm water. The water should be changed every day. Add sugar or salt to enable the flower to last.

2. Selection of Vases/ Containers

The main function of the vases or container is to support the flowers and foliage. The container should be subordinate

to the flower arrangement. It should be of the right size, shape, colour and material.

Types of vases or containers

- Jars, attractive bottles, tins.
- Tall cylinders, narrow necked vases, flat round dishes, deep trays, low round bowls.
- Bottles of different colours.
- Block of wood or bamboo baskets.
- Household pots, vessels, tumblers, shallow dishes.

3. Flower Holder

A flower holder is one which has sharp spikes upon which the stems can be firmly placed. This is known as pin type holder. Other than this we also have crumpled wire, split twigs etc. Flower holders must be strong and flexible, so that any type of stem can be easily fixed.

It should also be rust proof. Pin holders can be fixed to the bottom by clay or candle. This fixing must be done when the vase as well as the holders are dry. Large flowers and foliage can be arranged at the bottom so that the holders are concealed.

Oasis is a trademarked name for wet **floral foam**, the spongy phenolic **foam** used for real **flower** arranging. It soaks up water like a sponge and acts both as a preservative to prolong the life of the **flowers** and a support to hold them in place.

5.8.2 Styles in flower arrangement

1. **The traditional style:** Where a mass of flowers of all kinds, colours and size are used together. This produces a multi-coloured mass effect.

2. **Oriental style:** This is Japanese mode of flower arrangement. **Ikebana** which means «living flowers» is the Japanese art of flower arrangement. Ikebana can be divided into two styles - the moribana shallow vase style and the nageire tall vase style. It gives an impression of a natural growing plant. The stems are so arranged that their lines form an attractive pattern. The flowers are placed in such a way so as to produce balance. The flowers are always in odd numbers, three, five, seven or eleven. The Japanese oriental style usually follows three principles at different levels. The **highest** level signifies heaven (shin), the **middle** refers to the man (soe) and **lowest** indicates the earth (hikae).

- Heaven- $1\frac{1}{2}$ times to 2 times the height or width of the vase.
- Man - $\frac{3}{4}$ th the height of heaven.
- Earth - $\frac{1}{2}$ the height of man.

The arrangement of these branches and the kenzan or spiked metal holder are drawn in a simple diagram, called a kakeizu. Today there are four main styles of flower

arrangement: 1) *rikka* (standing flowers); 2) *nagarie* (throw in); 3) *moribana* (piled-up); and *shokai* (living flowers).

3. **The modern style:** A combination of traditional and oriental style.
4. **Floating arrangement:** This arrangement can be made in shallow bowls and trays with short stemmed flowers. The largest, highest and most attractive flower can be allowed to float in the centre and others grouped around. Flowers should not completely cover up the water.

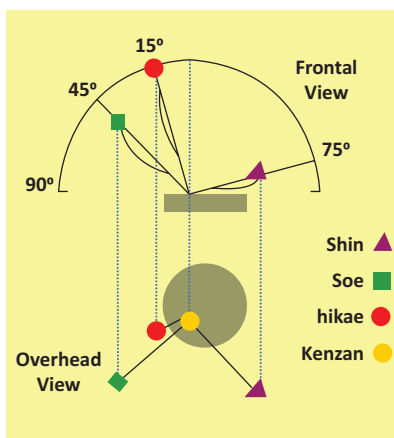
Points to be considered while arranging flowers

1. Have an idea about the arrangement.
2. Arrange the flowers first and then fill up with leaves and twigs.
3. Have big bright flowers at the bottom and small light coloured flowers on higher levels.
4. Work from centre and then deviate from that to one points in the arrangement.



Ikebana

Source: Sogetsukai Foundation



Kakeizu Moribana (piled-up flowers)





5. Fill the flower vase with enough water to dip the stem ends.
6. Sprinkle salt, sugar or suitable preservative to keep up the freshness of flower for long.
7. Display the flower arrangement beautifully in a place to be seen and enjoyed. Select suitable accessories to go in with the arrangement.
8. All the principles of design should be followed for pleasing effects.

5.8.3 Types of Flower Arrangements

Mass Arrangement: A group of flowers of all kinds, colours, size and textures are combined in a container. Usually decorative container is used.

Line arrangement: This arrangement is simple, meaningful, beautiful and informal. This arrangement gives an impression of natural, free growing plant. Odd numbers of flowers are used at various levels.

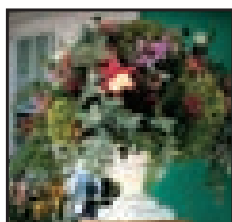
Combination arrangement: A combination of line and mass arrangement gives rise to geometric shapes as cone, crescent, circle, triangle, 'L' shape and so on.

Foliage arrangement: Arrangements using leaves or branches of plants are foliage arrangements, (e.g.) ferns, crotons, cannas, cactus, weeds can also be arranged effectively with a touch of imagination.

Miniature arrangement: They are small arrangements usually within four inches in height arranged in small containers like egg shell, small bottles, lids, etc.

Dry Arrangement: These are particularly useful during rainy season when there are very few flowers, Dry arrangements with fruits, vegetables, seed pods, bare branches, flower plumes of tall grasses, sugar cane, roots, stems of money plant, a small dead tree, the clustering, especially peacock feathers if well-arranged presents a unique appearance and are suitable for interior decoration. Dry arrangements with wood can be painted in silver, white or gold for variation in style.

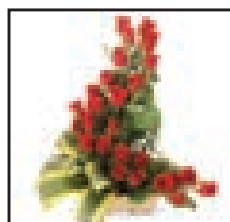
Arrangement of Flowers



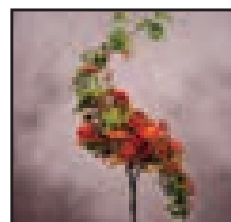
Mass arrangement



Line arrangement



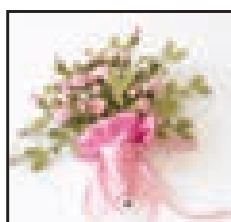
L-shape arrangement



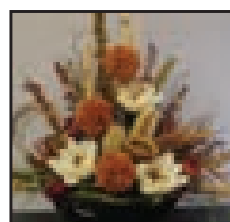
Crescent arrangement



Foliage arrangement



Miniature arrangement



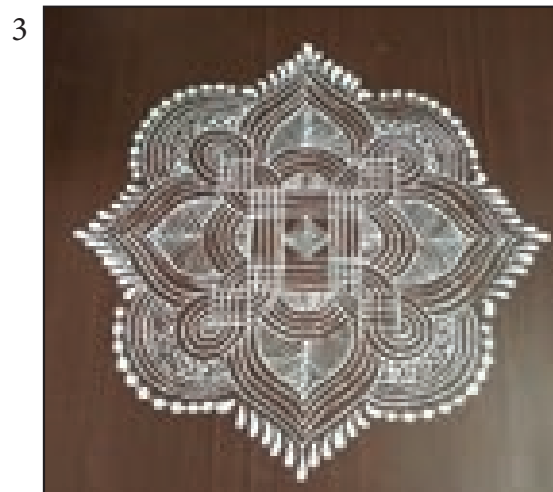
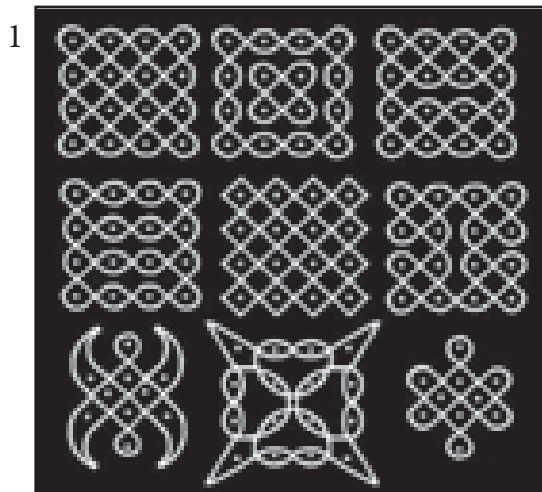
Dry arrangement



5.9 Floor Decorations

Floor decorations are essential part of the rich heritage of Indian culture and imparts colour, joy, and happiness. The various types of floor decorations are:

- **Kolam:** Kolam is a free hand drawing of various designs. It can be either dotted or in various designs. For drawing kolams, either white stone or chalk powder, enamel paint, white or coloured salt, sand or powders and solutions prepared by mixing rice flour and water is used. Red mud solution is used as painting to give added brightness. In rural areas, people spray cow dung mixed with water as base on floors before putting Kolam.
- **Rangoli:** Coloured dry powder which are usually made from kolam powders are used. They are mixed with either sand or salt.
- **Alpana:** Alpana is a traditional art where the design is painted with white paint. Usually zinc oxide and gum are mixed to keep it for a longer duration.
- **Flower Carpet:** Different coloured flowers, petals and leaves are arranged over the design. Wet sand may be evenly spread beneath the flower carpet to have a raised effect.





SUMMARY

- House is a shelter made of floors, walls, windows, roof etc where family members live together and spend maximum part of their life.
- The residential buildings may broadly be classified into five categories – namely detached houses, semi-detached houses, row houses, apartments and sky scrapers.
- While selecting a site for the construction of a house the factors such as physical features, soil conditions, sanitary facilities, practical convenience, good neighbourhood and legal characteristics are to be taken into consideration.
- The principles to be considered for organising rooms while planning a house are aspect, prospect, privacy, grouping, roominess, furniture requirements, circulation, flexibility, sanitation and practical consideration.
- Design is selecting and arranging of materials with two aims – order and beauty.
- Structural design is the design made by the size, form, colour and texture of an object. Structural design is essential to every object. Decorative design is the surface enrichment of a structural design. This adds luxury to a design.
- The elements of art are line, shape and form, texture, space and colour
- Line is the basic element of art. It is a series of points joined together in two-dimensional form.
- Shape is an area enclosed by lines. Shapes are flat and generally considered two dimensional. Basic shapes are rectangles, squares, triangles and circles.
- Form is the organization of visual elements in three dimensions. In addition to height/ length and width, form also has actual depth or illusion of depth. Basic forms are spheres, cubes and cones.
- Texture refers to the tactile quality of an object which may be felt by touch or may be identified through visual examination.
- The principles of design are harmony or unity, proportion, balance, rhythm, and emphasis.
- Harmony is a single idea or impression.
- Proportion means the relationship of sizes or areas to one another or to a whole.
- Greek oblong or Golden Oblong refers to proportions of parts to one another and to the whole. Golden section is known as law of relationship which helps in dividing the space interestingly. This oblong uses the ratio of 2:3 or 3:5 in case of flat surfaces and 5:7:11 in case of solids.
- Balance is equalization of attraction on both sides of the center. Rhythm is organized movement in continuity. Emphasis is the art principle by which the eye is carried first to the most important thing in any arrangement and from that point to every other detail in order of importance.
- All colours may be obtained by mixing in various proportions three



fundamental hues: red (R), Yellow (Y), and blue (B). These are called the three primary colours, because they are the elements in the use of pigment. They are the only hues in pigment that cannot be obtained by mixing other hues.

- When two primary colours are mixed in equal proportions, secondary colours are obtained. When a primary and an adjacent secondary colour is mixed an intermediate colour is produced. There are six intermediate colours-Yellow Green, Blue Green, Blue Violet, Red Violet, Red Orange and Yellow Orange.
- When two secondary colours are mixed a tertiary colour is produced. When two tertiary colours are mixed a quaternary colour is produced. There are three quaternary colours.
- Warm colours with dark values and in bright intensities make the objects appear bigger and closer where as cool colours, light values and dull intensities make the objects appear smaller and far away.
- Related colour harmony is obtained by using colours which are similar. Monochromatic colour harmony also known as one hue colour harmony. It involves use of tints, shades and tones of the same hue. Analogous colour harmony involves colours which are lying adjacent to each other in the prang colour chart are used.
- Contrasting colour schemes are based on opposing colours and tend to be stimulating and balanced because they include both warm and cool colours.
- In Complementary colour scheme, two colours that are directly opposite in the Prang colour chart are combined. Double complementary colour harmony include two adjacent colours and their opposite colours in the Prang colour chart are combined.
- Split complementary colour harmony, combines one dominant colour and two subordinate colours that lie on either side of its complementary colour. Triad colour harmony makes use of three colours which are at equal distance in the Prang colour chart are combined. Tetrad colour harmony is formed by any four hues equidistant on the Prang colour chart.
- Flower arrangement is defined as an art of arranging flowers with other plant materials in receptacles and organized into compositions having harmony of form, texture and colour.
- Floor decorations are essential part of the rich heritage of Indian culture and imparts colour, joy, and happiness. The various types of floor decorations arekolam, rangoli, alpana and flower carpet.
- In Kitchen/ terrace gardening greens, fruits and vegetables can be grown at the backyard or terrace/ balcony of the house by using kitchen waste water.



GLOSSARY

- **Peg board** - Perforated hardboard which is pre-drilled with evenly spaced holes. The holes are used to accept pegs or hooks to support various items, such as frying and sauce pans
- **Loft**- roof storage space
- **Built-in- cupboard** - cabinet attached with wall
- **Complementary- opposite**
- **Tint-light value**
- **Shade- dark value**
- **Tactile quality**—texture felt by touch
- **Florist foam**-oasis/ spongy **foam** used for **flower** arranging

EVALUATION

I. Choose the correct answer

1. _____ is the impression that the house creates on a person who views it from outside.

- a) Aspect
- b) Prospect
- c) Flexibility
- d) Grouping



2. The best location for kitchen will be _____ corner of the house.

- a) East
- b) West
- c) North
- d) South

3. This _____ design adds luxury to a design.

- a) Structural
- b) Decorative
- c) Natural
- d) Artistic

4. The _____ lines suggest the feelings of strength, regularity, loftiness, spirituality and action.

- a) Horizontal
- b) Vertical
- c) Diagonal
- d) Curved

5. _____ shapes of forms are stylized or simplified versions of natural shapes/forms.

- a) Abstract
- b) Natural
- c) Geometric
- d) Actual

6. _____ balance is more subtle, casual, dynamic, active and suggest flexibility.

- a) Informal
- b) Formal
- c) Bilateral
- d) Radial

7. _____ is organized movement in continuity.

- a) Rhythm
- b) Emphasis
- c) Proportion
- d) Harmony

8. White, black and grey are _____ colours.

- a) Neutral
- b) Secondary
- c) Tertiary
- d) Primary



9. _____ refers to the brightness or dullness of a colour.
- Hue
 - Value
 - Prang
 - Intensity
10. This colour scheme involves two colours that are directly opposite in the Prang colour chart.
- Complementary
 - Double complementary
 - Split complementary
 - Triad
14. Give examples of naturalistic, geometric and abstract shapes.
15. Define space as an element of art.
16. Name two types of space.
17. Name two types of texture.
18. What do you understand by tactile/visual texture?
19. Name three qualities of colour.
20. Define value.
21. Define intensity of colour.
22. Name tertiary colours.
23. Name two neutral colours.
24. Name any two light colours and two heavy colours.

II. Write Very Short Answers (2 marks)

- Define housing.
- What do you mean by owning a house?
- What do you mean by renting a house?
- List the type of furniture that can be used in a living room.
- What are the different types of kitchen arrangements?
- What is design?
- What is structural design?
- What is decorative design?
- What are the various types of lines?
- What does vertical and horizontal line suggest?
- Name three common shapes.
- Give the meaning of naturalistic shapes.
- What do you understand by geometric shapes?
- What is the difference between shade and tint?
- Name two warm colours.
- Name two cool colours.
- Name any two intermediate and quartnery colours.
- Define prang colour chart.
- What are the types of balance?
- What is symmetrical or formal balance?
- Name any two asymmetrical or informal balance .
- What do you understand by proportion?
- What is meant by harmony?
- What is flower arrangement?
- What is floor decoration? Give two examples.



III. Write Short Answers (3 marks)

1. List various activities carried out and space allotted for them at home.
2. Classify major areas based on various activities carried out at home.
3. What points should be kept in mind while making arrangement in living room?
4. What are the requirements of structural design?
5. What are the requirements of decorative design?
6. Highlight the importance of veranda.
7. What do understand by colour harmonies?
8. Give an account of the following colour schemes.
 - a) Monochromatic colour scheme.
 - b) Analogous colour scheme.
 - c) Complementary colour scheme.
 - d) Split complementary colour scheme.
 - e) Triad colour scheme.
 - f) Double complementary colour scheme.
 - g) Tetrad colour scheme.
9. Write short note on dimensions of colour.
10. Blue and green are considered to be receding colours. Why?
11. Which colours are considered to be advancing colours? Where can be used?
12. Highlight the importance emphasis as a principle of design.

13. What do you understand by Greek/golden Oblong?
14. Bring out the significance of proportion in designing.
15. What are the ways of bringing emphasis in interiors?
16. What are the various styles of flower arrangement?
17. What are the points to be considered while arranging flowers?
18. What are the different types of floor decorations?

IV. Write in detail (5 marks)

1. Explain the importance of housing.
2. Give an account of various types of residential buildings.
3. List the factors affecting choice of house.
4. Compare the advantages of owning and renting a house.
5. How kitchen should be organized? Discuss in detail.
6. Explain the points to be considered while making arrangements for bed room?
7. Explain the factors to be considered while selecting a site for the construction of a house.
8. Discuss the principles of organising rooms while planning a house in detail.
9. Enlist the various elements of art.
10. Elaborate on the various principles of design in detail with suitable examples.
11. Bring out the effect of vertical and horizontal lines in interiors of home.



12. Pavithra is short and obese. What type of lines she should choose in her dress to overcome height and why?
13. Elaborate on different types of colour schemes.
14. What do the diagonal and curved lines represent?
15. Explain the different types of shapes and forms.
16. Differentiate between formal and informal balance.
17. In Sheela's house, there is a room with dark coloured walls. How can we make the room bigger?
18. What are the different colour harmonies? Give suitable examples.
19. Differentiate triadic and tetrad colour schemes.



REFERENCES

Books

1. PremavathySeetharaman, Sonia Batra, PreethiMehra, (2015), An Introduction to Family Resource Management, CBS Publishers and Distributors (P) Limited, New Delhi.
2. Varghese M.A, Ogale M.N, Srinivasan K, (1985), Home Management, New Age International (P) Limited, Publishers, New Delhi.
3. PremavathySeetharaman and ParveenPannu (2009), Interior Design and Decoration, CBS Publishers and Distributors (P) Limited, New Delhi.
4. Narayana Tanthry, (2002), Practical House building Manual, Tantry Associates, Bangalore.
5. Pratap Rao M, (1998) Interior Design Principles and Practice, Standard Publishers Distributors, Delhi