**LANDSCAPE**

**Q1. Different natural elements used in interior landscape?**

**Ans:** The elements of composition are the visual qualities that people see and respond to when viewing a space. Visual qualities can illicit many different emotions and feelings, and the more positive those feelings, the more likely people are to enjoy and use a space.

**LIGHTNING IN LANDSCAPE**

**LIGHTNING TECHNIQUES** : PATH LIGHTING Typical fixtures: mushrooms, tulip lights, lanterns, tier lights, specialty lights.

• These low impact or shielded lights face down to the ground or paths to add safety, security and visibility for walking.

• Path landscape lighting evenly and clearly light pathways, walkways and water elements like ponds and waterfalls while avoiding glare.

**ARCHITECTURAL LIGHTING** : The techniques of architectural lighting are used to accentuate the variations in texture as well as architectural features in brick and stone work, soffit details, and fascia. Architectural lighting can also be used to enhance gateways, fountains, and statues

LIGHTNING TECHNIQUES : STEP LIGHTING / DECK LIGHTING Typical fixtures: spot/accent lights, specialty lights Step lighting brings deck to life at night and help guests navigate stairs safely with specialized step and deck lighting. Fixtures can be installed beneath benches, as recessed lights in the risers of steps, and as surface lights on vertical posts and Up lighting is a dramatic way to highlight the beauty of statuary, trees, especially large or flowering types. By lighting trees from two or more directions, your target appears to be 3-dimensional and more lifelike.

**LIGHTING FIXTURES**: SOLAR LIGHTS

♣ Solar landscape lights make use of tiny photo voltaic cells (PV) or solar powered cells to charge the battery that is integrated into the lighting fixture.

♣ Solar landscaping lighting comes in a vast variety of styles.

♣ Most manufacturers prefer to install the PV cell into the lighting fixture itself. This can’t work if you place the light in the shade.

• Fluorescent light: A long straight tube coated with phosphor containing low pressure mercury vapor that produces white light.

• Halogen: High pressure incandescent lamps containing halogen gases such as iodine or bromine, allowing filaments to be operated at higher temperatures.

• Luminaire: A complete lighting unit consisting of a lamp, ballast as required with the parts designed to distribute the light, position and protect the lamp and connect them to the power supply

• Neon: A low pressure gas contained within a glass tube; the color emitted depends on the gas

• Light emitting diodes: Light emitting diodes (LED) are tiny light bulbs without the filaments that would burn out on ordinary light bulbs, illuminated solely by the movement of electrons in a semiconductor material. "

PAVING IN LANDSCAPE : DESIGN OF PATHWAYS

•The Path defines the passage in the landscape created. It could be paved or unpaved. Paving materials are used to eliminate hazards from mud and dust and to form a smooth surface for ease of circulation.

•Various design patterns in the pathways help beautify the surroundings and look pleasing to the eye.

•The paving material could be natural or man-made. Man-made paving materials are available in a wide variety of textures and colors. Some of the materials used are explained in the following.

USE OF STONE AS A PAVING MATERIAL

• Stone, one of the oldest paving materials, offers good, durable, wearing surface with a minimum maintenance required.

• Rubble and ashlars masonry are the two forms of stone used for paving.

• Rubble masonry is rough stone, as it comes from the quarry, but may be trimmed somewhat where necessary.

• Ashlars masonry is hewed or cut stone from the quarry and is used much more often than Rubble for the surfacing of the walls

USE OF BRICKS AS A PAVING MATERIAL

• Bricks offer a great variety of textures and colors as well as flexibility in use.

• it composed of hard, burnt clay and shale, brick is available any colors due to the variation the chemical content of clay. Bricks can be used to make tiles with varied shapes. Because of the hard surface and resistance to wear and cracking, these tiles are best suited for outdoor paving.

USE OF CONCRETE AS A PAVING MATERIAL

• Concrete maybe poured in situ, offers a variety in texture and colour and forms a durable walking surface. It is extensively used as a paving material.

• Concrete lends itself to variations in finish, and maybe smooth or rough, with aggregates exposed when desired.

**FENCING AND EDGING**

• To be aware of ourselves, our identity, to elevate ourselves, self-importance, ownership, security, privacy, all these human behaviors are such that we build walls and fences around us.

• There are many different types of fencing to choose from :

Wrought Iron : Wrought-iron fences also offer more security features than other types of fencing, as you can include spikes across the top of your tall wrought iron fence to discourage intruders

Vinyl Privacy : Vinyl privacy fences define your property lines and provide a backdrop for additional landscaping. Unlike wooden privacy fences, vinyl or composite fencing does not need to be replaced, repaired or refinished due to decay

Stacked Stone : A stacked stone retaining wall can perform double duty as both a decorative fence and a means to protect against eroding soil.

Picket : Picket fences are more for decoration and definition than they are for privacy and security

Bamboo: Bamboo is a renewable resource, thus making it an eco-friendly choice for your fence material. Bamboo grows quickly, so you can plant a live bamboo fence line a part of your landscape and expect to have tall stalks of bamboo in about two years.

**STONE**:

• Landscaping with stone brings in a natural element that evokes solidness and a sense security.

• Types of Landscape Stones and their uses

♣ Retaining Walls--There are many different types of stones that can be used when it comes to creating retaining walls in the lawn. One may elect to assemble a retaining wall around a small pond, or even a garden.

♣ Flagstone-- Flagstone is a very popular choice when it comes to stones that are used for steps, or simple ornamental design.

♣ Boulders --Homeowners elect to implement the use of boulders in the decorative design of their landscaping. Great products in the way of boulders include that of Birchwood, Wisconsin, Granite, and even Honeycomb Western stone.

♣ Marble--Many individuals elect to use marble when decorating their landscape. Marble can be used to create signs, around or in garden ponds, and even marble fountains can be purchased in order to bring out the natural appeal of a pond or garden area. They are also used in sculptures.

♣ Natural Stone--Natural stone is often a choice for small landscaping structures.

♣ Decorative Stones--Decorative stones are used in pathways or trails to beautify the garden. Some of them are Royal George, Walnut nuggets, beachwood pebbles and many more.

♣ Other-- Other than that there are pebbles used for sidewalks, stepping stones used in gardens and stone is also used as stone lantern in Chinese gardens.

**Wood**: Uses of wood chips

♣Use wood chips for pathways alongside a garden. They are durable and resist compaction from foot traffic, and offer a cushioned surface to walk.

♣Incorporate color into a path using wood chips. This will guide foot traffic away from certain areas you want to protect.

♣Use wood chips as mulch. This will reduce weeds, keep the soil warmer in the winter and cooler in the summer, and conserve the moisture in the soil by reducing evaporation.

♣Work wood chips into the soil to correct compacted soil. This soil allows more water and air to promote plant health. The wood chips also add nutrients to the soil as they decompose.

Wood:

* Redwood

Lower grade redwood is fine for decking and rails. This wood is rot-resistant. Due to its high cost we may only want to use it on the most visible parts of the deck. It is relatively soft wood, and can be easily damaged, hence it is best to drill holes to avoid splitting the wood.

* Cedar

Cedar is similar to redwood in its durability, and resistance to rot and insect pests. Cedar is usually not used as a structural component in construction for it is much weaker than redwood & cypress. It is used only for the decorative portions of a project. On average cedar is about half the cost of redwood and about twice the cost of pressure treated lumber.

* Plastic-Wood Composites & Vinyl

Both of these materials are new & are becoming popular in the construction industry. Plasticwood composite lumber is manufactured from plastic and wood fibers. Composites are virtually indestructible & almost impervious to rot and insects. Both these construction materials are more expensive than redwood, but they will last indefinitely.

Q2. Different types of plants used in indoor and out door places in both residential and commercial places?

Ans : The different types of plants used in indoor and out door places in both residential and commercial places are:

**INDOOR PLANTS**:

**Spathiphyllum (Peace Lily)**

A Spathiphyllum, also known as a Peace Lily, is a favourite low light houseplant with lush dark green leaves and beautiful white flowers . It is easy to care for and will even clean the air of harmful chemicals. Do not put in direct sunlight.

#### Ferns

Most people think ferns need a great deal of water; so when the fern starts to get brown & crispy in the middle, they give it more water. This is the exact opposite of what you should do. Boston ferns, Kimberly queen ferns, angel ferns, asparagus ferns all loose their vibrant green color when they need water and get brown & crispy in the middle when they are over watered. Ferns enjoy being moist but not soggy!

#### Hedera (Ivy)

Ivy is a great indoor and outdoor plant. There are over a hundred different varieties to choose from. You can select an ivy to suit your individual needs. There are large leafed rapid growers and small leafed slow growers. Ivies come in a wide range of colors: solid green, leaves splashed with white, cream, gold, or yellow; or leaves edged with silver or gray green.

#### Kalanchoe

The genus Kalanchoe includes more than 100 plants, but only a few are regularly seen in cultivation. Kalanchoes are native to arid areas, and they are popular succulents. Like many succulents, these are not difficult plants to grow, providing you are careful with the water, especially in the winter.

#### Rhipsalis

An attractive and really easy to grow houseplant. This succulent start off growing upright but then later hangs gracefully.

**LIGHT:** They are really happy anywhere, making them the perfect houseplant!

**WATER:** They are really flexible when it comes to water, temperature and light requirements.

Another suitable indoor plants: Calathea makoyana, Saxifraga stolonifera, Asplenium nidus, herbs.

**Outdoor plants**

#### Cyclamen

Cyclamen is a small tuberous plant with green heart shaped leaves. All cyclamen species have characteristic white markings on the leaves. The cyclamen is available in a collection of wonderful colors: white, violet purple, pink and red. Cyclamen is also suitable as an indoor plant.

#### Fuchsia

There are fuchsia available in a wide range of colors, with the bell-like flowers blooming in white, pink, red, purple or various combinations. They've also been bred as single, double, or semi-double flowers. And finally, they can be used in any number of situations, as trained standards, trailing baskets, or pots of colorful blooms

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#### Ajuga

Bugleweed is a fast-growing ground cover(can although use as trailing plant for baskets) that usually creeps within just a few inches of the ground (the species name, reptans, means „creeping“). Ajuga blooms from spring to mid-summer. Flower color varies but is often blue to purple.

**Hebe**

Hebe plants are evergreens that produce flowers in the summer. They are usually very easy to grow

**LIGHT:** Hebe plants grow best when they are given full sun. They can also tolerate being placed in part sun or shade. However, if hebe plants are grown in the shade, they won't produce as many flowers. The plant will probably become leggy too.

**Q3. Execution of landscape in interior and exterior.**

**Ans:** The three activities in any landscape design namely, Creation, Execution and Maintenance are best synchronized right from the inception of the project. To successfully execute a project, one has to demonstrate the ability to visualize and implement the design created by the planner.

Planning a new landscape project can be intimidating. Just like any project, it's important to set a budget, plan properly and take it in small steps. 

1. Set a budget
2. Plan
3. Take small steps

First things first, **set a budget**.   
  
Next, **plan**. This is the most tedious, time consuming and most important step.   
​ **How to Plan**  
A sketch of your property will help you visualize and put things into perspective. Take a few measurements, and include any large existing structures within your sketch. Next, start filling in the blank areas with the components of your landscape that are most important to you.  
  
**Follow the Plan**  
Now that you have a sketch in place of where everything will lay out, you can see how certain things will fit your space. This will also help determine which parts of the project have to be completed first and which ones can wait till later. From a contractors point of view, there is always a preferred order of operations. Unfortunately, the homeowner may not see things the same way. Budget and timing can get in the way quickly.  
  
**Choose your Priorities**  
An example of the preferred order to install from the contractors point of view:

* Patio/hardscaping
* Landscape beds construction and planting
* Irrigation system
* Water feature
* Landscape lighting
* Lawn installation

However, the homeowner may not have the same vision (for any given reason). The above order does not have to be followed as long as the property owner is aware of a few things and the contractor is able to accommodate these things. Choose your priorities based on time of year, budget and personal preferences, so your contractor can plan and price your project accordingly. Keep these things in mind though:  
  
**Patio/Hardscaping**: Usually require heavy equipment that need space to work, easy access to the job site, and could damage things like existing turf, landscape beds and irrigation systems.  
  
**Planting Beds:** Also require equipment to move soil around the property and can sometime cause space restrictions and impede traffic flow around the worksite.  
  
**Irrigation System:**Easiest to install before the turf is planted. Best to install after things like patio, deck, and hardscape. Requires certain things to be roughed in like water supply, conduits for future use under driveways, patios, and sidewalks.  
  
**Fencing:** Can limit equipment access to the property. Your local city or HOA may have restrictions on size, shape, color, and location of the fence.  
  
**Water Features:** Usually require a power supply, water supply and underground catch basin. Things like swimming pools or hot tubs may also need a gas line for a heat source to be trenched underground to the heater location.  
  
**Final Touches:** Things like mulch, lighting, annual flowers are usually left until the end of the project.  
  
**Lastly, take small steps.**Planning and executing a landscape project can be stressful and expensive. Eliminate unnecessary steps by taking things slowly.   
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**Q4.Explain the system if irrigation used in interior landscaping.**

**Ans:**

**Q5.Write a short note on:**

* **Garden Furniture**
* **Flower Arrangement**
* **Form of indoor plants**

**Ans: GARDEN FURNITURE : Garden furniture**, also called **patio furniture** or **outdoor furniture**, is a type of [furniture](https://en.wikipedia.org/wiki/Furniture) specifically designed for outdoor use. It is typically made of [weather-resistant](https://en.wikipedia.org/wiki/Weathering) materials such as aluminium which does not rust. The oldest surviving examples of garden furniture were found in the gardens of [Pompeii](https://en.wikipedia.org/wiki/Pompeii).