FAQ's

1. What are the various ordering principles in design?

- **Axis:** A line established by two points in space, about which forms and spaces can be arranged in a symmetrical or balanced manner.
- **Symmetry:** The balanced distribution and arrangement of equivalent forms and spaces on opposite sides of a dividing line or plane, or about a center or axis.
- **Hierarchy:** The articulation of the importance or significance of a form or space by its size, shape, or placement relatives to the other forms and spaces of the organization.
- **Rhythm:** A unifying movement characterized by a patterned repetition or alternation of formal elements or motifs in the same or a modified form.
- **Datum:** A line plane, or volume that, by its continuity and regularity, serves to gather, measure, and organize a pattern of forms and spaces.

2. Explain in details the attributes of an axis?

The axis is perhaps the most elementary means of organizing forms and spaces in architecture. It is a line established by two points in space, about which forms and spaces can be arranged in a regular or irregular manner.

Since an axis is essentially a linear condition, it has qualities of length and direction, and induces movement and promotes views along its path. For its definition, an axis must be terminated at both of its ends by a significant form or space. The notion of an axis can be reinforced by defining edges along its length. These edges can be simply lines on the ground plane, or vertical planes that define a linear space coincident with the axis. An axis can also be established simply by a symmetrical arrangement of forms and spaces.

The terminating elements of an axis serve to both send and receive its visual thrust. These culminating elements can be any of the following:

- Points in space established by vertical, linear elements or centralized building forms
- Vertical planes, such as symmetrical building facades or fronts, preceded by a forecourt or similar open space
- Well-defined spaces, generally centralized or regular in form
- Gateways that open outwards toward a view or vista beyond

3. Explain in details the attributes of Symmetry?

There are two fundamental types of symmetry:

1. Bilateral symmetry refers to the balanced arrangement of similar or equivalent elements on opposite sides of a median axis so that only one plane can divide the whole into essentially identical halves.
2. Radial symmetry refers to the balanced arrangement of similar, radiating elements such that the composition can be divided into similar halves by passing a plane at any angle around a center point or along a central axis.

An architectural composition can utilize symmetry to organize its forms and spaces in two ways. An entire building organization can be made symmetrical. Or a symmetrical condition can occur in only a portion of the building and organize an irregular pattern of forms and spaces about itself.

4. Explain various ways of creating hierarchy?

Hierarchy by size:

A form or space may dominate an architectural composition by being significantly different in size from all the other elements in the composition. Normally, this dominance is made visible by the sheer size of an element. In some cases, an element can dominate by being significantly smaller than the other elements in the organization, but placed in a well-defined setting.

Hierarchy by shape:

A form or space can be made visually dominant and thus important by clearly differentiating its shape from that of the other elements in the composition. A discernible contrast in shape is critical, whether the differentiation is based on a change in geometry or regularity. Of course, it is also important that the shape selected for the hierarchically significant element be compatible with its functional use.

Hierarchy by placement:

A form or space may be strategically placed to call attention to itself as being the most important element in a composition. Hierarchically important locations for a form or space include:

- The termination of a linear sequence or axial organization
- The center piece of a symmetrical organization
- The focus of a centralized or radial organization
- Being offset above, below, or in the foreground of a composition

5. Define datum and ways of employing datum?

A datum refers to a line, plane, or volume of reference to which other elements in a composition can relate. It organizes a random pattern of elements through its regularity, continuity, and constant presence

Given a random organization of dissimilar elements, a datum can organize the elements in the following ways:

- **Line:** A line can cut through or form a common edge for the pattern, while a grid of lines can form a neutral, unifying field for the pattern.
- **Plane:** A plane can gather the pattern of elements beneath it or serve as an encompassing background for the elements and frame them in its field.
- **Volume:** A volume can collect the pattern of elements within its boundaries or organize them along its perimeter.

6. Explain Rhythm in Architecture?

Rhythm refers to any movement characterized by a patterned recurrence of elements or motifs at regular or irregular intervals. The movement may be of our eyes as we follow recurring elements in a composition or of our bodies as we advance through a sequence of spaces. In either case, rhythm incorporates the fundamental notion of repetition as a device to organize forms and spaces in architecture.

Almost all building types incorporate elements that are by their nature repetitive. Beams and columns repeat themselves to form repetitive structural bays and modules of space. Windows and doors repeatedly puncture the surfaces of a building to allow light, air, views, and people to enter the interior. There by architecture can incorporate rhythm in the above occurrences of repetitions.