FAQ's

1. Explain how architecture is comparable with an organism in nature in terms of its component aspects?

A living organism is something which is not constant and static. It is in constant interaction with its surroundings. Also it has dynamic functions that happen within itself. An organism gets birth, it grows and it dies. Even architecture is similar in all above aspects, except that the processes of growth, function and decay may be unnoticeably in a slow.

Every organism has a specific function it has to perform for its survival and its form has evolved according to its function. And that specific form will have a structural support inside to retain the form. The mass of the form and the structure will be made of specific material based on its function. The organism will have a specific kind of skin that hold the form and performs certain function. Even architecture has all the components related to each other in the similar way. So the aspects of architecture can be listed as:

- An Overall Form
- An Inner Structure
- An Exterior Skin
- A Material
- A Specific Function etc

There are more aspects to architecture like color, texture, circulation system etc

2. What is significance of a FORM?

Every organism in nature has a specific form, which has evolved over time based on the function and context of the organism. Example: The form of a tree, from of animal skull anything and everything in nature will have a unique form.

Similarly every creation in architecture has its own unique form, based on its function and context. The various building typologies like house, temple, school, museum, auditorium, etc have a unique overall form and also an appropriate form of interior space and details, so as to accommodate the assigned function.

Even with in the same typology of building, Say a religious building; the form can vary according to the specific functional context. For example, a temple, a mosque and church all are same typologies as a place of worship, but have evolved to a unique form according to their functional, philosophical and cultural needs. Thus we can understand how function dictates the form of a building.

3. What is significance of a STRUCTURE?

Structure is the skeletal framework of an organism. For example; In case of a human being bones form the structural system. Every organism for the given form will have a specific structure according to its function and context.

In architecture, structure is the skeletal framework of the building's form. In case of a modern building the columns, beams, and the foundation, all together which form the support system can be called the structure, which doesn't include the surfaces and other massing elements.

In evolution of architecture, the form is more dependent on the structure. The form in architecture was limited by the structural possibilities and techniques. For example the form of mosques of Middle East is due to its structural aspect of arches, vaults and domes.

However in the contemporary world of architecture, the form of a building is not totally dependent on its structural system. In the present world the structural possibilities are endless.

4. What is significance of a MATERIAL?

Every organism for its given function and structure, will have an appropriate material, which again will be interlinked to the form and function of the organism. In nature it's very difficult to see the aspects of form, structure and material working separate. They are always mutually interrelated.

Even within the human body various parts are made up of tissues and cells of different material quality, so as to support a specific function.

Architecture as a constructed building is made up of building materials like brick, stone, etc. In early times and rural settings the materials like mud and wood are used to create spaces. Accordingly the form of the buildings was limited with those materials construction techniques. Later with the usage of brick and dressed stone; with the advantage of physical properties of those materials (like strength) the construction techniques evolved. This eventually opened up more possibilities of building form and scale of the building. Possibilities of LARGER SPACES, TALLER STRUCTURES, DURABLE STRUCTURES came in to being.

Also it should be noted that these materials has their own psychological and aesthetic meanings, which was utilized in history. In examples of religious architecture across world, stone is seen to be expressing the permanence and strength of the religious faith. Also the religious structures stood for centuries carrying forward the

religious messages, through architecture.

For the past few centuries with the advent of new construction materials like RCC (reinforced cement concrete), steel, glass etc the possibilities of form have become endless. LARGER, TALLER and DURABLE STRUCTURES and CREATIVE OTHER-WORLDLY FORMS are being created. No more the material and the structure is a limitation for the form of architecture. Form is determined mainly by the function and aesthetics of the architecture.

5. What is significance of a SKIN?

In nature, the aspect of skin or a shell is very crucial, which we can understand with the example of the human skin. In the human body skin acts as the shell which holds all internal parts together in one form. Also skin primarily protects the inner system form the environment. Also skin is an expressive entity to communicate certain visual qualities to the outer world through its properties.

In architecture the skin will refer to the outer shell of the building form. The outer shell that is supported by the hidden structure inside, leads to the overall form and the massing. The building shell will be made up of a material that is different from its structural core, because it serves different purpose.

Skin of a building has certain crucial purposes like:

- Massing
- Separating the interior and exterior
- Protecting interior
- Thermal control
- Aesthetics