FAQ's

1. What are the various qualities of a SPHERE?

Sphere is a solid generated by the revolution of a semicircle about its diameter. Whose surface is are all points equidistant from the center. A sphere is centralized and highly concentrated form. Like the circle from which it is generated, it is self-centering and normally stable in its environment.

Similarly spherical form creates centrality and creates focus towards itself in an architectural composition. Also it has compactness. It retains its spherical form from any point of view. However in contradiction to the quality of a circle, sphere is unstable three dimensionally. However its derivative hemisphere is highly stable.

Examples - Matirmandir at Auroville, Sanchi Stupa etc

2. What are the various qualities of a CYLINDER?

Cylinder is a solid generated by the revolution of a rectangle about one of its sides and also by rotating a rectangle along its axis. A cylinder is centralized about the axis passing through the centers of its two circular faces. Along this axis, it can be easily extended.

It has primarily acquired its characteristics from a circle, and also a bit from that of a rectangle.

Cylindrical form creates centrality and creates focus towards itself in an architectural composition. Unlike a sphere, cylinder is three dimensionally very stable. The cylinder is stable if it rests on one of its circular faces; it becomes unstable when its central axis is inclines from the vertical.

However the stability of the cylindrical form depends on it proportion of height vs base width. Shorter the height more stable a cylindrical form looks. Taller the cylinder, it looks less stable (looks in equilibrium against gravity).

Examples - the Bastions of forts, the traditional granaries in temple complexes etc

3. What are the various qualities of a CONE?

A cone can be generated in two ways: First by rotating a triangle along its axis and by extruding a circle vertically while simultaneously reducing the diameter of the circle to zero.

Cone has equally acquired its characteristics from a circle and a triangle. Like that of a Triangle cone has a Strong sense of

directionality. Due to characteristics of a circle it has a sense of smoothness instead of rigidness (unlike a pyramid). Conical form creates centrality and creates focus towards itself in an architectural composition.
More than a cylinder and a cone are three dimensionally very stable. The stability of the conical form doesn't much depends on it proportion of height vs. width of the base
While rested on its flat base it is stable. It is unstable if rested on its apex and sides.
Similar to cylindrical form, structurally a conical form has lot of advantages which has been made use of, even in primitive examples of architecture.
• No edges
• Compactness
• Stability of construction.
• Bearing against external forces like wind water etc

4. What are the various qualities of a PYRAMID?
A pyramid is primarily generated from triangles. It is a polyhedron having a polygonal face and it has triangular faces meeting at a common point.
It has totally acquired its characteristics from a triangle.
Like that of a Triangle pyramid has a Strong sense of directionality. Unlike cone it has a sense of rigidness instead of smoothness. Pyramid form creates centrality and creates focus towards itself in an architectural composition.
More than any other form it is three dimensionally very stable. The stability of the pyramid form doesn't much depends on it proportion of height vs base width.
Resting in any or its faces it expresses stability, however if rested in its vertex or edges it acquires instability and equilibrium against gravity.
Structurally a pyramidical form has lot of advantages which has been made use of in history of architecture.
• Compactness
• Stability
• Bearing against external forces like wind water etc
However it has a disadvantage of usability of space inside and also the ease of construction.
Examples:
Great pyramids, of Egypt
Gopurams, of South Indian Temple Architecture.

5. What are the various qualities of a CUBE?

A cube is generated from square planes. It is a prismatic solid bounded by six equal square sides. The angle between any two adjacent faces will be a right angle.

It has acquired its characteristics from a square shape. The square represents the pure and the rational. Though cube is static in nature, it has dynamic nature based on its position and orientation in a field. Because of the equality of dimensions cube is a static forms that lacks sense of direction and movement. It is a stable form except when it stands on one of its edges or corners.

Visually it doesn't have a sense of verticality or horizontality, rather it is neutral. Another aspect of a cube is that it poses a variety of visual form according to the changing view point.