

Q1) Boundary Representation In Solid modeling and computer aided design, boundary representation often abbreviated as B-rep or BRP is a method for representing shape using the limits. A solid is represented as a collection of connected surface elements, the boundary between solid & non-solid.

Q2) Spatial Partitioning In geometry, space partitioning is the process of dividing a space into two or more disjoint subsets. In other words, space partitioning divides a space into non-overlapping regions. Any point in the space



can be identified to lie exactly one of the regions

(3-) CSG CSG stands for (Constructive Solid Geometry) is a technique used in solid modeling. Constructive geometry allows a modeller to create a complex surface of object by using Boolean operators to combine simpler objects, potentially generating virtually complex object by combining a few primitive ones

(4) Sweep representation These are useful for constructing 3-D objects that possess translational, rotational, or other symmetries. We can represent such objects by specifying a two-dimensional shape and a sweep that moves the shape through a region of space.