

FAQs

1. Brief about the early life and career of architect Buckminster fuller?

- American architect ,Systems theorist, Author, designer and an inventor
- Fuller was born on July 12, 1895, in Milton, Massachusetts, the son of Richard Buckminster Fuller and Caroline Wolcott Andrews.
- Published more than 30 books, coining / popularizing terms such as "Spaceship Earth", "Ephemeralization", "Synergetic", etc
- Popularized the geodesic dome
- Carbon molecules known as "fullerenes" were later named by scientists for their structural and mathematical resemblance to geodesic domes

2. Write a brief note on "Geodesic domes".

- Fuller taught at Black Mountain College in North Carolina during the summers of 1948 and 1949,
- There, with the support of a group of professors and students, he began reinventing a project (Geodesic dome) that would make him famous.
- Although the geodesic dome had been created some 30 years earlier by Dr. Walther Bauersfeld, Fuller was awarded the United States patents and he is credited for popularizing this type of structure.
- One of his early models was first constructed in 1945 at Bennington College in Vermont.
- In 1949, he erected his first geodesic dome building that could sustain its own weight with no practical limits. It was 4.3 meters (14 feet) in diameter and constructed of aluminum aircraft tubing and a vinyl-plastic skin, in the form of an icosahedron.
- To prove his design, Fuller suspended from the structure's framework several students who had helped him build it.
- The U.S. government recognized the importance of his

work, and employed his firm Geodesics, Inc. in Raleigh, North Carolina to make small domes for the Marines. Within a few years there were thousands of these domes around the world.

2. Write a note on "continuous tension – discontinuous compression" geodesic dome.

- Fuller's first "**continuous tension – discontinuous compression**" geodesic dome (full sphere in this case) was constructed at the University of Oregon Architecture School in 1959 with the help of students.
- These continuous tension – discontinuous compression structures featured single force compression members (no flexure or bending moments) that did not touch each other and were 'suspended' by the tensional members.

3. Brief about Awards and Recognitions given to Buckminster fuller.

- Fuller was awarded 28 United States patents and many honorary doctorates.
- In 1960, he was awarded the Frank P. Brown Medal from The Franklin Institute
- Fuller was elected as an honorary member of Phi Beta Kappa in 1967, on the occasion of the 50th year reunion of his Harvard class of 1917.
- In 1968 he was elected into the National Academy of Design as an Associate member, and became a full Academician in 1970

5. What does Dymaxion mean?

Fuller associated the word Dymaxion with much of his work, a portmanteau of the words **dynamic**, **maximum**, and **tension** to sum up the goal of his study, "maximum gain of advantage from minimal energy input.