About Six Sigma:-

Six Sigma is a set of tools and techniques/strategies for process improvement originally developed by Motorola in 1981. Six sigma became well known after Jack Welch made it a central focus of his business strategy at General Electric in 1995, and today it is used in different sectors of industry.

Six Sigma seeks to improve the quality of process outputs by identifying and removing the causes of defects (errors) and minimizing variability in manufacturing and business processes. It uses a set of quality management methods, including statistical methods, and creates a special infrastructure of people within the organization ("Champions", "Black Belts", "Green Belts", "Yellow Belts", etc.) who are experts in the methods. Each Six Sigma project carried out within an organization follows a defined sequence of steps and has quantified value targets, for example; process cycle time reduction, customer satisfaction, reduction in pollution, cost reduction and/or profit increase.

The term Six Sigma originated from terminology associated with manufacturing, specifically terms associated with statistical modelling of manufacturing processes. The maturity of a manufacturing process can be described by a sigma rating indicating its yield or the percentage of defect-free products it creates. A six sigma process is one in which 99.99966% of the products manufactured are statistically expected to be free of defects (3.4 defects per million), although, as discussed below, this defect level corresponds to only a 4.5 sigma level. Motorola set a goal of "six sigma" for all of its manufacturing operations, and this goal became a byword for the management and engineering practices used to achieve it.

Methodologies of Lean Six Sigma focus on reducing defects and eliminating waste in an organization’s processes, which is the secret of success for many leading companies and other prosperous organizations in the world.

Implementing lean six sigma leads to improved quality along with more efficient ways of producing that quality, which results in higher profits for the organization. Both manufacturing and service organizations stand to benefit from these methodologies.

Using a variety of structured and statistical tools, lean six sigma helps us to optimize business processes to the fullest extent and thrive in business scenarios where our competitors might be struggling to survive. The lean six sigma tools can be applied for various processes in the organization such as design, marketing, sales, production / operations, purchase, stores, customer- service, finance, legal-compliance and risk management