India is fifth largest growing market and fastest progressing economy in the world (International Monetary Fund's World Economic Outlook (WEO),2019). The increased GDP is contributed by several factors like man, money, machines, material and management. To meet the demand of increased GDP, India's manpower or labour force is estimated to be increased further to 160-170 million by 2020 (ASSOCHAM,2018). But despite increased rate of labour force, the participation of female is very less and remain lowest among other countries of the world. This gender disparity is particularly high in the areas of Science, Technology, Engineering, and Maths. As per the report published by the World Economic Forum, only 14.3% of science researchers in India are women.

The gender inequality and biasness were deeply rooted in our country from the past and has been impacting present as well to certain level. The factors such as socio-cultural and economic are considered responsible factors contributing to the gender inequality as well as for hindering economic growth of the country at full. The socio-cultural factors such as perceived age of marriage for female and stereotyped role of caregiver and homemaker after marriage are the two crucial reasons which explains as to why most of the girls are either restricted to enroll themselves in school and college or have to drop in between, if enrolled for pursuing higher education and carrier choices. Further, subjects like science, technology, engineering, and math have been stereotyped as the male's subjects and thus very less girls opt these subjects at college level for pursuing higher education. The other important factor adding to the same fact that girls are less encouraged to pursue higher degree is the economic status of the family. Most of the parents or working population of India are still falling either under below poverty line or middle-income group. The biggest concern for the parents, falling under such economic status is whether to invest in the education or marriage of their daughter. The societal and peer pressure plays a major role in this context and thus in such cases, usually family circumstances and poor economic conditions does not allow a girl child to pursue higher education in the field of science and technology. Although previous years statistics shows that girls are showing good progress and performance at school level compared to boys then also there is a smaller number of girls' registrations happens for pursuing higher education especially in the areas of science and technology.

'STEM Education System' aims to create learning program using the basics of Science, Technology, Engineering and Maths that can inculcate creative thinking and innovative methodology among young inquisitive minds by using the concept of experiential learning to apply theory into practice. With the focus on 'Make in India' and 'Digital India' campaigns, this is the right time to rise to the challenge and develop a culture of application-based learning and innovation among children. Thus, implementing STEM education will help empowering and creating school children's in the following ways. Firstly, it helps in fostering advanced skills such as analytical and conceptual thinking and creative problem solving. Secondly, STEM education system is based on experiential learning through the root of theory and practice to understand the science and engineering behind the things. It helps further to create learning environment and developing critical thinking and innovativeness among children. Thirdly, learning the practical aspects of subjects like science, engineering, technology and math at the school age adds both interest and logical orientation among children to apply in the future for technology suited jobs in the area of robotics, data science and artificial intelligence with more confidence and know- how of advanced learning tools.

The STEM education system as a corporate social responsibility effort and to promote higher education mindset among girls and their parents have been started in India by the government and some corporates with the purpose for aiding the girls who have lesser exposure and opportunities due to poor economic status. But the STEM system is not yet widely accepted among our teaching pedology and thus bigger initiatives are required for well-functioning of the system. One of the initiatives required is teacher's enthusiasm to impart and encourage STEM education, especially amongst the girls. Gender norms and perceived notions about what subjects girls can do and what cannot do need to be broken and teachers must

encourage girls to take science or to become engineer or scientist. Secondly, the girls from the underprivileged areas should be given the facilities at their remote areas so that poor economic condition does not create hindrance to them from learning the STEM. Thus, resource and equipped labs need to be set up for the girls who are staying in the remote areas and villages. These labs help in providing access to the advanced technical, communication and digital information. The third important initiative is approaching influencers and role model such as scientist, engineers and STEM Professionals who have been associated with challenging projects. The role model can influence and spark innovative thinking among girls to learn and implement their knowledge in today's scenario to solve every day life's challenges related to health, sanitation and ways of living. Thus by taking the positive attitude and effort to create and build the STEM education system for girls will not only going to reduce the gender inequality but will also capitalize future growth for the nation where number and ratio of girls doing jobs in the field of science, technology, engineering and Maths will be more. This will further strengthen the dream of seeing India as a digital and technologically sound economy where girls will also equally be contributing into the nation success.