Industry 4.0

October 21, 2019
__Source__: Press Information Bureau

A Pilot Project for ushering in 'Industry 4.0' in the country, was launched for implementation at the Modern Coach Factory (MCF), Raebareli. The Ministry of Railways and Department of Science & Technology have joined hands in partnership with IIT Kanpur for taking up a unique project on 'Industry 4.0' by launching a Pilot Project for implementation at Modern Coach Factory, Raebareli.

About Industry 4.0

- 'Industry 4.0' commonly referred to as the fourth industrial revolution, is a name given to the **current trend of automation, interconnectivity and data exchange in manufacturing technologies to increase productivity.**
- The term "Industrie 4.0", shortened to I4.0 or simply I4, originated in 2011 from a project in the high-tech strategy of the German government, which promotes the computerization of manufacturing.
- Industry 4.0 is a complex **Cyber-Physical Systems which synergizes production with digital technologies, the Internet of Things, Artificial Intelligence, Big Data & Analytics, Machine Learning and Cloud Computing.** The concept includes:
    - Smart manufacturing
    - Smart factory
    - Lights out (manufacturing) also known as dark factories
    - Industrial internet of things also called internet of things for manufacturing
- Industry 4.0 fosters what has been called a "smart factory". Within modular structured smart factories, cyber-physical systems monitor physical processes,

create a virtual copy of the physical world and make decentralized decisions.

- Over the Internet of Things, cyber-physical systems communicate and cooperate with each other and with humans in real-time both internally and across organizational services offered and used by participants of the value chain