

**P.R. GOVERNMENT COLLEGE (A), KAKINADA**  
**NAAC Accredited “A” Grade Institution (CGPA –**  
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**DEPARTMENT OF HISTORY**

**Study Material for students**



*Prepared by B V V SESHADRI AKULA*

**TOPIC: Industrial revolution**

## Industrial revolution

What is revolution in primarily revolution means a change.

Actually political revolution means a lot of changes in governments and agriculture revolution means there is a changes agriculture way of production and social revolution means there are a lot of changes in social matters.

In the same way industrial revolution means a change its takes place, where handicrafts are replaced by machineries, small scale industries are replaced by big industries lot of more production.

No one known the actual date when the industrial revolution was was started but at first this revolution will takes place in textile industries.

### Why industrial revolution firstly takes place in England.

Compare to other countries England have many characteristic features that leads to England become the first country to experience the industrial revolution.

They are

Geographical conditions,

Natural resources,

Having large coastal boundaries,

Climatic conditions,

Coal and iron reserves,

Economical stability,

Merchant companies in England,

Imperialism.

These are the major features of England leads to industrial revolution.

**Political and economical stability:** compare to other countries England's political condition was very stable. And removal of slavery became the first step to the development of industries.

**Revolution in textile industry:** in middle of 16th and 18 centuries people mostly follow the outdated methods in their daily industries, in textile industries also eat it takes many days to get finish it product like merchants collected wool from other villages and gives that would to other village woman's to produce thread from that woollen so it leads to much time. But in the meantime many new innovations take place in textile industry. Like James Hargreaves who invented spinning journey machine, IT results problem of making thread. Another one Richard arm right he developed

same thread making machine, Samuel Crompton who invented water frame, John key he established flying shuttle through this the more production was increased.

**Revolution coal industries:** at first comen he inventor team engine but later James Watt invented modern steam engine which helps to remove the water from mines. In 18th century a new methods are developed in finding the coal. **Like pillar method, stall method.** In 1877 exhaust fan was invented and Hampery DAV who invented safety lamp.

**Changes of methods in iron and steel production:** in past centuries mostly merchants used trees used as a purpose of fire to burn and melting and smelting purpose of iron, so this leads to lot of deforestation. But in 1784 Henry card replaced the Tree Coal I with earth coal to melt under smell tree iron process. In 1828 Nalison who invented new fire flame to melt the iron. And later Henry Besmer who invented Basemar method to produce the stronger Steel. In 1878 William Siemens he invented electric fire or flame to melt and produce iron and steel. so this leads to a lot of change in the iron and steel production.

**Steam engines:** at first in 1698 team pipe was invented by Thomas saware, in 1705 Thomas new Camin invented steam engine but this steam engine needs more fuel and also it was not that much secured. Letter James watt and John smitten they both rearrange the steam engine invented by Thomas New Camon. So from that onwards steam engine used in many industries like mining in road and transportation railways shipping etc.

**Revolution highways and canals:** in olden days the people get tired of their transportation facilities, that situation from the suggestion of Louie faier the construction of Highway and their responsibilities are given private contract institutions. (Turn pike road institution private institution). Later John Mac Adam who invented a new method in roads that is gravel roads.

**Changes in coal transportation:** in olden days the transportation of coal from field to industry tax very much time, but after the invention of new canals and many canal bridges the transportation time was reduced from days to hours. James Bond invented Water Bridge. And many new highways are developed this leads to moral development of transportation England. It causes much more industrial revolution.

**Invention of railways:** George Stephenson he invented rail engine in 1814. In 1830 a new railway line established from Liverpool to Manchester.

**Other inventions:** in 1844 Samuel more invented telegraph, in 1876 Alexander Graham Bell invented telephone, and likewise many inventions are taken place in European States.

## **Consequences of industrial revolution**

There were many consequences coming from industrial revolution like

- Time has changed from extremist ideas to democratic and republic ideas.

- Financial stability and economical growth in Britain because of industrial revolution.
- Revolution leads to production of more and more goods so this leads to decrease in price of goods.
- Development of socialism and communism many philosophers developed these to philosophies.
- The most important impact from industrial revolutionaries' development of imperialism and colonialism.
- Industrial revolution made changes not only in industries that also in the fields of literature, science and technology, arts and rigorous changes in the social and economical conditions of world.

Department of History