

To speak of an “Industrial Revolution,” the process of industrialisation was a gradual one that unfolded over the course of the eighteenth and nineteenth centuries, eventually becoming global.

## Note

Like the Neolithic Revolution that occurred 10,000 years before it, the Industrial Revolution dramatically transformed the way humans lived their lives to a degree that is hard to exaggerate. It is not difficult to define industrialisation; it is simply the use of machines to make human labour more efficient and produce things much faster. As simple as this sounds, however, it brought about such sweeping changes that it virtually transformed the world, even areas in which industrialisation did not occur. The change was so basic that it could not help but affect all areas of people's lives in every part of the globe. The Industrial Revolution began in England in the late 18<sup>th</sup> century, and spread during the 19<sup>th</sup> century to Belgium, Germany, Northern France, the United States, and Japan. Almost all areas of the world felt the effects of the Industrial Revolution because it divided the world into "have" and "have not" countries, with many of the latter being controlled by the former. England's lead in the Industrial Revolution translated into economic prowess and political power that allowed colonisation of other lands, eventually building a worldwide British Empire.

**Powerful Trade Guilds:** The expansion of world trade and the acquisition of colonies in different parts of the world as well as the demand for goods began growing during the seventeenth and eighteenth centuries. But merchants could not expand production within towns, because of the urban crafts and trade guilds were powerful there. Merchants from the towns in Europe began moving to the countryside, supplying money to peasants and artisans, persuading them to produce for an international market.

**Cheaper Labour from Rural Areas:** Income from proto industrial production supplemented their shrinking income from cultivation. In 1730, the earliest factories in England came up but only in the late eighteenth century that the number of cotton factories multiplied. In 1760 Britain was importing 2.5 million pounds of raw cotton to feed its cotton industry. By 1787 this import soared to 22 million pounds.

**New Technology:** In the eighteenth century, a series of inventions increased the efficiency in the production process (carding, twisting and spinning, and rolling) as well as enhanced the output per worker, enabling each worker to produce more, and they made possible the production of stronger threads and yarn.

**The Pace of Industrial Change:** The cotton was the leading sector in the first phase of industrialisation up to the 1840s; then led the iron and steel industry. The expansion of railways, in England from the 1840s and in the colonies from the 1860s, the demand for iron and steel increased abruptly. The new industries could not easily displace traditional industries. The pace of change in the ‘traditional’ industries was not set by steam powered cotton or metal industries. New technology was expensive and merchants and industrialists were cautious in using it.

**Popularity of Intricate Designs:** Machines were producing uniforms, standardised goods for a mass market. The demand in the market was often for goods with intricate designs and specific shapes. In Victorian Britain, the upper classes the aristocrats and the bourgeoisie preferred things produced by hand. Handmade products came to symbolise refinement and class. They were better finished, individually produced, and carefully designed. Industrialists usually preferred hand labour, employing workers for the season.

**Seasonality of Working Opportunity:** Seasonality of work in many industries meant prolonged periods without work. After the busy season was over, the poor were on the streets again. Moreover, the income of workers depended not on the wage rate alone. Till the mid-nineteenth century, about 10 percent of the urban populations were extremely poor. The 1830s is economic slump in the proportion of unemployed went up in between 35 and 75 percent in different regions.

- The fear of unemployment made workers hostile to the introduction of new technology.
- In the woollen industry, women who survived on hand spinning began attacking the new machines.
- Roads were widened, new railway stations came up, railway lines were extended, tunnels dug, drainage and sewers laid, rivers embanked.

**The Age of Indian Textiles:** In many countries Coarser cottons were produced, but the finer varieties often came from India. Surat on the Gujarat coast connected India to the Gulf and Red Sea Ports; Masulipatnam on the Coromandel Coast and Hooghly in Bengal had trade links with Southeast Asian ports. Till 1750 this network was controlled by Indian merchants going to breaking down.

**Rise of European Companies:** The European companies gradually gained power by a variety of concessions from local courts, then the monopoly rights to trade. This resulted in a decline of the old ports of Surat and Hooghly through which local merchants had operated. While Surat and Hooghly decayed simultaneously Bombay and Calcutta grew. This shift from the old ports to the new ones was an indicator of the growth of colonial power.

#### **Weaver's Changed Condition**

The consolidation of East India Company power after the 1760s did not initially lead to a decline in textile exports from India. Before establishing political power in Bengal and Carnatic in the 1760s and 1770s, the East India Company had found it difficult to ensure a regular supply of goods for export. The French, Dutch, Portuguese as well as the local traders competed in the market to secure woven cloth.

#### **East India Company**

As the East India Company established political power, it could assert a monopoly right to trade. The East India Company proceeded to develop a system of management to control and to eliminate competition, control costs, as well to ensure regular supplies of cotton and silk goods. The Company tried to eliminate the existing traders and brokers connected with the cloth trade, and establish a more direct control over the weaver. They appointed paid servant called the gomasthas to supervise weavers, collect supplies, and examine the quality of cloth. In many weaving villages there were reports of clashes between weavers and gomasthas. The new gomasthas were outsiders, with no long term social link with the village. They acted arrogantly, marched into villages with sepoys and peons, and punished weavers for delays in supply even beating and flogging them. The weavers lost the space to bargain for prices and sell to different buyers the price received from the Company was miserably low and the loans they had accepted tied them to the Company. Over time many weavers began refusing loans, closing down their workshops and taking to agricultural labour.

**Goods from Manchester:** The cotton industries developed in England, industrial groups began worrying about imports from other countries. They pressurised the government to impose import duties on cotton textiles so that Manchester goods could sell in Britain without facing any competition from outside. At the same time industrialists persuaded the East India Company to sell British manufactures in Indian markets as well. Exports of British cotton goods increased dramatically in the early nineteenth century. At the end of the eighteenth century there had been virtually no import of cotton piece goods into India. Produced by machines at lower costs, the imported cotton goods were so cheap that weavers could not easily compete with them.

**Beginning of Factories:** The first cotton mill in Bombay came up in 1854 and around the same time jute mills came up in Bengal. In North India, the Elgin Mill was started in Kanpur in the 1860s, and a year later the first cotton mill of Ahmedabad was set up. By 1874, the first spinning and weaving mill of Madras began production.

Some merchants from Madras traded with Burma while others had links with the Middle East and East Africa. They operated within India, carrying goods from one place to another, banking money, transferring funds between cities, and financing traders. When opportunities of investment in industries opened up, many of them set up factories.

**Migration for Employment Opportunities:** Peasants and artisans who found no work in the village went to the industrial centre in search of work. Over 50 percent workers in the Bombay cotton industries in 1911 came from the neighboring district of Ratnagiri, while the mills of Kanpur got most of their textile hands from the villages within the district of Kanpur. From the United Provinces (Modern UP or Uttar Pradesh), for instance, they went to work in the textile mills of Bombay and in the jute mills of Calcutta. Getting jobs was always difficult, even when mills multiplied and the demand for workers increased.

**The Peculiarities of Industrial Growth:** European Managing Agencies, which dominated industrial production in India, were interested in certain kinds of products. They established tea and coffee plantations, acquiring land at cheap rates from the colonial government; and they invested in mining, indigo and jute. Most of these were products required primarily for export trade and not for sale in India. The yarn produced in Indian spinning mills was used by handloom weavers in India or exported to China.

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In first decade of the twentieth century a series of changes affected the pattern of industrialisation. As the Swadeshi movement gathered momentum, nationalists mobilised people to boycott foreign cloth. Yet, till the First World War, industrial growth was slow. The war created a dramatically new situation. With British mills busy with war production to meet the needs of the army, Manchester imports into India declined. Indian mills had a vast home market to supply. Over the war years industrial production boomed.

**Dominance of Small scale Industries:** In the twentieth century, handloom cloth production expanded steadily: almost trebling between 1900 and 1940. Handicrafts people adopt new technology if that helps them improve production without excessively pushing up costs. By 1941, over 35 percent of

handlooms in India were fitted with fly shuttles: in regions like Travancore, Madras, Mysore, Cochin, Bengal the proportion was 70 to 80 percent.

**Creation of Market for Goods:** From the beginning of the industrial age, advertisements have played a part in expanding the markets for products, and in shaping a new consumer culture. When Manchester industrialists began selling cloth in India, they put labels on the cloth bundles. The label was needed to make the place of manufacture, mark the quality and the name of the company familiar to the buyer. When Indian manufacturers advertised the nationalist message was clear and loud. If you care for the nation then buy products that Indians produce. Advertisements became a vehicle of the nationalist message of Swadeshi.

### Multiple Choice Questions

- In 1990, which popular music publisher produced a music book?
  - Oxford
  - Bollivabooks
  - E T Paul
  - Cambridge
- Why could not the merchants expand production within towns in England?
  - Because in towns, the Government rules were very strict
  - Because in towns, urban crafts and trade guilds were very powerful
  - Because then the electricity was available only for a short duration
  - Because in towns, the police was very corrupt
- When did the earliest factories come up in England?
  - In 1720s
  - In 1730s
  - In 1740s
  - In 1750s
- Which were the two most dynamic industries in Britain?
  - Cotton Industries
  - Electronic Industries
  - Silk Industries
  - Metal Industries
- Who improve the steam-engine produced by New Comen?
  - James Hargreaves
  - James Watt
  - Samuel Crompton
  - John Macadam
- Which Indian port connected India to the Gulf and Red Sea Ports?
  - Surat
  - Broach
  - Calicut
  - Cochin
- Which two Indian ports had links with South-East Asian countries?
  - Surat
  - Hooghly
  - Masulipatnam
  - Broach
- What was the name of the paid servant who was appointed by the English Company to deal with the Indian weavers?
  - Gomastha
  - Seth
  - Mamlatdar
  - Lambardar
- When was the first cotton mill set-up in India?
  - In 1814
  - In 1834
  - In 1854
  - In 1874
- Name the material which were exported to England from India?
  - Rice
  - Wheat
  - Cotton
  - Jute
- By 1873, Britain was exporting steel and iron worth how many millions to foreign countries?
  - About 57 million pounds
  - About 67 million pounds
  - About 77 million pounds
  - About 87 million pounds
- Which city of England developed as a finishing centre?
  - Manchester
  - Liverpool
  - Birmingham
  - London

13. What was the main reason for breaking down the network of foreign trade of the Indian merchants in the 18<sup>th</sup> century?
- The coming of the European companies
  - The mutual conflict of the Indian rulers
  - Continuous famines in India
  - The foreign competition
14. Who were the first European nations to come to India?
- The English
  - The French
  - The Dutch
  - The Portuguese
15. Who, among the following, improved the steam engine produced by New Comen?
- Mathew Boulton
  - James Watt
  - Henry Ford
  - Graham Bell
16. Which of the following group of industries were the dynamic industries of England during its earliest phase of industrialisation?
- Cotton and metals
  - Cotton and silk
  - Silk and Footwear
  - Footwear and glass
17. What did the term 'Orient' refer to?
- England
  - Asia
  - Russia
  - America
18. Which is the pioneer country in industrialisation?
- Russia
  - India
  - England
  - None of these
19. What was the 'Spinning Jenny'?
- Machine
  - Vehicle
  - Song
  - Dance form
20. Which among these was a pre-colonial sea port?
- Vishakhapatnam
  - Chennai
  - Hooghly
  - Cochin
21. Where was the first cotton mill set up?
- Surat
  - Bombay
  - Calcutta
  - Kerala
22. Where was the first jute mill set up?
- Bengal
  - Haryana
  - Gujarat
  - Karnataka
23. Who was a 'Jobber'?
- Trusted worker
  - Painter
  - Dancer
  - Soldier
24. What was the 'Fly Shuttle' used for?
- Washing
  - Weaving
  - Drying
  - Sowing
25. Who created the first 'cotton mill'?
- Mathew Boulton
  - James Hargreaves
  - Henry Patullo
  - Richard Arkwright
26. Who improved the Steam Engine?
- Samuel Luke Fildes
  - Bhai Bhosle
  - James Watt
  - None of these
27. In what goods did the Indians dominate the international market?
- Spices
  - Silk
  - Cotton
  - Both (b.) and (c.)
28. Which Company sought to monopolise rights to trade in India?
- East India Company
  - Bird Heilgers and Co.
  - Andrew Yule
  - Both (a.) and (c.)
29. Who was Dwarkanath Tagore?
- Soldier
  - Industrialist
  - Painter
  - Author
30. Which industries were busy in the cold months?
- Gas works
  - Mining
  - Breweries
  - Both (a.) and (c.)

## ANSWERS

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
c	b	b	a	b	a	b	a	c	b
11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
c	d	a	d	b	a	b	c	a	c
21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
b	a	a	b	d	c	d	a	b	d