
THE AGE OF INDUSTRIALISATION

■ IMPORTANT TERMS

- **Innovation:** Newly produced or introduced; a novelty.
- **Guild:** An association of craft man or merchants following same craft to protect the member's interest and supervise the standard of the work.
- **Stapler:** A person who staples or sorts wool according to, its fibre.
- **Fuller:** A person who fulls - gathers cloth by pleating.
- **Carding:** A process of preparing fibres such as cotton or wool, prior to spinning.
- **Efficacy:** Effectiveness; power to produce certain effect.
- **Mill:** Building fitted with machinery for manufacturing processes/factory.
- **Tanning:** Convert raw hide into leather by soaking in liquid containing tannic acid.
- **Food Processing:** Technique of cropping and mixing food for making jam, juices etc.
- **Victorian Britain:** Britain during the reign of Queen Victoria.
- **Vagrant:** A person without a settled home or regular work.
- **Brewery:** A place where beer etc. is brewed commercially. Brewing is a process of infusion, boiling and fermentation.
- **Night Refuge:** Night shelter for homeless people.
- **Company officials:** Officials of the East India Company.
- **Bourgeoisie:** The upper middle class.
- **Monopoly:** Exclusive right of trade in an article or good granted by some authority or license authorizing this.
- **Sepoy:** Indian soldier of the British army.
- **Fly shuttle:** A shuttle worked by machinery (shuttle is a small instrument or solid thread holder that carries the under thread in a sewing machine)
- Spinning Jenny-devised James Hardgrave's in 1764.
- Building activities intensified in the cities after 1840.
- Place goods accounted for 33% of India's export in 1811-12.
- India's export reduced by 1950-51.
- Cotton piece goods constituted over 31% by 1850.
- The first cotton mill in Bombay came up in 1854.
- Four mills were at work by 1862.
- The first Jute Mill set up in Bengal in 1855.
- The Elgin Mill was started in Kanpur in 1860.
- The first cotton mill of Ahmedabad was set up by 1874.
- There were 2,436,000 workers in Indian factories by 1946.
- Cotton piece goods production in India doubled between 1910 - 1912.
- Handloom production almost trebled between 1900 and 1940.

■ BEFORE THE INDUSTRIAL REVOLUTION

- The coming up of the Factory:** The earliest factories in England came up by the 1730s. But it was only in the late eighteenth century that the number of factories multiplied.
The first symbol of the new era was cotton. Its production boomed in the late nineteenth century. 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. This increase was linked to a number of changes within the process of production. In the early nineteenth century factories increasingly became an intimate part of the English landscape. So visible were the imposing new mills, so magical seemed to be the power of new technology, that contemporaries were dazzled. They

concentrated their attention on the mills, almost forgetting the bylines and the workshops where production still continued.

- ii. **The pace of industrial change:** The most dynamic industries in Britain were clearly cotton and metals. Growing at a rapid pace. Cotton was the leading sector in the first phase of industrializations up to the 1840s. After that the iron and steel industry led the way. With the expansion of railways in England from the 1840s and iron and steel worth about £77 million, double the value of its cotton export.
- (a) **The new industries could not easily displace traditional industries:** Even at the end of the nineteenth century, less than 20 per cent of the total workforce was employed in technologically advanced industrial sectors. Textiles were a dynamic sector, but a large portion of the output was produced not within factories outside, within domestic units.
- (b) **The pace of change in the 'traditional' industries** was not set by steam powered cotton or metal industries, but they did not remain entirely stagnant either. Seemingly ordinary and small innovations were the basis of growth in many non-mechanized sectors such as food processing, building, pottery, glass work, tanning, furniture making and production of implements.
- (c) **Technological changes occurred slowly:** They did not spread dramatically across the industrial landscape. New technology was expensive and merchants and industrialists were cautious about using it. The machines often broke down and repair was costly. They were not as their investors and manufactures claimed.

James Watt improved the steam engine produced by Newcomer and patented the new engine in 1781. His industrialist friend Mathew Bolton manufactured the new mode. But for years he could find no buyers. At the beginning of the nineteenth century, there were no more than 321 steam engines all over England, of these, 80 were in cotton industries, nine in wool industries, and the rest in mining, canal works and iron works. Steam engines were not used in any of the other industries till much later in the century. So even the most powerful new technology that enhanced the productivity of labor manifold was slow to be accepted by industrialist.

■ HAND LABOUR AND STEAM POWER

In many industries the demand for labour was seasonal. Gas works and breweries were especially busy through the cold months. So they needed more workers to meet their peak demand. Book binders and printers, catering to Christmas demand, needed extra land before December. At the waterfront, winter was the time that ships were repaired and spruced up. In all such industries where production fluctuated with the season, industrialists usually preferred hand labour, employing workers for the season.

A range of products could be produced only with hand labour. Machines were oriented to producing uniforms standardized goods for a mass market. But the demand in the market was often for goods with intricate designs and specific shapes. In mid-nineteenth century Britain, for instance, 500 varieties of hammers were produced and 45 kinds of axes. These required human skill, not mechanical technology.

In Victorian Britain, the upper classes- the aristocrats and the bourgeoisie-preferred things produced by hand. Handmade products came to symbolize referent and class. They were better finished. Individually produced and care fully designed. Machine made goods were for export to the colonies.

- **Life of the workers:** If you had a relative or a friend in a factory, you were more likely to get a job quickly but not everyone had social connections. Many job seekers had to wait weeks, spending nights under bridges or in night shelters. Some stayed in Night Refuges that were set up by private individuals; others went to the casual wards maintained by the poor Law authorities.

Seasonality of work in many industries meant prolonged periods without work. After the busy season was over, the poor were on the streets again. Some returned to the countryside after the winter, when the demand for labour in the rural areas opened up n places. But most looked for odd jobs, which till the mid-nineteenth century were difficult to find.

Wages increased somewhat in the early nineteenth century. But they tell us little about the welfare of the workers. The average figures hide the variations between trades and the fluctuations form year to year. FOI instance, when prices rose sharply during the prolonged Napoleonic war the real value of the what the workers earned fell significantly, since the same wages could not buy fewer things. Moreover the income of workers depended not on the wages rate alone. What was also critical was the period of employment; the number of days of work determined the average daily income of the workers. At the best of time till the midnineteentl century, about 10 percent of the urban populations were extremely poor. In periods of economic slump like the 1830s, the proportion of unemployed went up to any thing between 335 and 75 parent in different regions.

After the 1840s, building activity intensified in the cities, opening up greater opportunism of employment. Roads were winder end new railway stations came up railway lines were extended, tunnels dug, drainage and sewers laid, rivers embanked. The number of workers employed in the transport industry doubled in the 1840s and doubled again in the subsequent 30 years.

■ INDUSTRIALISATION IN THE COLONIES

- (i) **The Age of Indian Textiles:** Before the age of machine industries, silk and cotton goods form India dominated often came form India, America and Persian merchants took the goods form Punjab to Afghanistan; eastern Persia and Central Asia. Bales of fine textiles were carried on camel back via the north-west frontier, through mountain passes and across deserts. A vibrant sea trade operated through the main pre-colonial rots. Surat on the Gujarat coast connected India to the Gulf and Red sea Ports. Masulipatam on the commanded coast and Hooley in Bengal had trade links with Southeast Asian ports.

However, once the East India Company established political power, it could assert a monopoly right to trade. It processed to develop a system of management and control that would eliminate competition, control costs, and ensure regular supplies of cotton and silk goods. This it did through a series of steps.

- (a) **The company tried to eliminate the existing traders and brokers** connected with the trade and establish a more direct control over the weaver. It appointed a pain servant called the gomastha to weavers, collect supplies, and examine the quality of cloth.
- (b) It prevented Company weavers from dealing with other buyers. One way of doing this was through the system of advances. Once an order was placed, the weavers were given loans to purchase the raw material for their production. Those who took loans had to have over the cloth they produced of the gomastha. They could not take it many other traders.

Soon, however, in many weaving villages there were reports of clashers between weavers and gomsthas. Earlier supply merchants had very often lived with in the weaving villages and had a close relationship with weavers, looking after their needs and helping them in times of crisis. The new gomasthas were outsiders, with no long term social link with the village. They acted arrogantly, marched into villages with spays and peons, and punished weavers for delays in supply-often beating and flogging them. The weavers lost the space to a bargain of reprises and self to different buyers; the price they received from the company was miserably low and the loans they had accepted tied them to the Company.

In many places in Caryatid and Bengal, weavers deserted villages and migrated, setting up looms in other villages where they had some family elsewhere, weavers along with the village traders revolted, opposing the company and

its official. Over time many weavers began refusing loans, closing down their workshops and taking to agricultural labor.

- (ii) **Manchester Comes to India:** As cotton industries developed in England, industries groups began worrying about imports from other countries. They pressurized 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. But by 1850 cotton piece-goods constituted over 31 percent of the value of Indian imports; and by the 1870s this figure was over 50 percent.

Cotton weavers in India thus faced two problems at the same time: their export market collapses and the local market shrank being glutted with Manchester imports. Produced by machines at lower costs the imported cotton goods were so cheap that weavers could not easily compete with them. By the 1850s reports from most weaving regions of India narrates stories of decline and desolation.

By the 1860s, weavers faced a new rouble. They could not get sufficient supply of raw cotton of goods quality. When the American civil war broke out and cotton supplies from the US were cut off. Britain turned to India. As raw cotton exports from India increased the price of raw cotton shot up. Weavers in India were starved of supplies and forced to buy raw cotton at higher prices. In this, situation weaving could not pay.

■ FACTORIES COME UP

First cotton mill in Bombay came up in 1854 and it went into production two years later. By 1862 four mills were at work with 94,000 spindles and 2,150 looms. Around the same time jute mills came up in Bengal, the first being set up in 1855 and another one seven years later. In 1862 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.

- (i) **The Early Entrepreneurs:** many Indians became junior players in this trade, providing finance, producing supplies, and shipping consignments. Having earned through trade, some of these business men had visions of developing industrial enterprises in India. In Bengal, Drawkanath Tagore made his fortune in the China trade before he turned to industrial investment, setting up six joint-stock companies in the 1830s and 1840s. Tagore's enterprises sank along with those of others in the wider business crises of the 1840s, but later in the nineteenth century many of the China traders became successful industrialists. In Bombay, Parsis like Dinshaw Petit and Jamsedjee Nusserwanjee Tata who built huge industrial empires in India accumulated their initial wealth from exports to China and partly from raw cotton shipments to England, Seth Hukumchand, a Marwari businessman who set up the first Indian jute mill in Calcutta in 1917, also traded with China. So did the father as well as grandfather of the famous industrialist G.D. Birla.

As colonial control over Indian trade tightened, the space within Indian merchants could function became increasingly limited. They were barred from trading with Europe in manufactured goods, and had to export mostly raw materials and food grains raw cotton, opium, wheat and indigo required by the British. They were also gradually edged out of the shipping business.

- (ii) **Where did the workers come from? :** In most industrial regions workers came from the districts around. Peasants and artisans who found no work in the village went to the industrial centers in search of work. Over 50 per cent workers in the Bombay cotton industries in 1911 came from the neighboring district of Rangier, while the mills of Kanpur got most of their textile hands from the villages within the district of Kanpur. Most often mill workers moved between the village and the city, returning to their village homes during harvests and festivals. Over time, as

news of employment spread, workers traveled great distances in the hope of work in the mills. From the United Provinces, for instance, they went to work in the textile mills of Bombay and in the jute mill of Calcutta.

THE PECULIARITIES OF INDUSTRIAL GROWTH

When Indian businessmen began setting up industries in the late nineteenth century, they avoided competing with Manchester goods in the Indian market. Since yarn was not an important part of British imports into India, the early cotton mills in India produced coarse cotton yarn thread rather than fabric. When yarn was imported it was only of the superior variety. The yarn produced in Indian spinning mills was used by hand loom weavers in India or exported to China.

By the first decade of the twentieth century a series of changes affected the pattern of industrialization. As the swadeshi movement gathered momentum nationalists mobilized people to boycott foreign cloth. Industrial groups organized themselves to protect their collective interests, pressurizing the government to increase tariff protection and grant other concessions from 1906, moreover the export of Indian yarn to China declined since produce from Chinese and Japanese mills flooded the Chinese market. So industrialists in India began shifting from yarn to cloth production. Cotton piece goods production in India doubled between 1900 and 1912.

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:

Suddenly, Indian mills had a vast home market to supply. As the war prolonged, Indian factories were called upon to supply what was needed: jute bags, cloth for army uniforms, tents and leather boots, horse and mule saddles and a host of other items. New factories were set up and old ones ran multiple shifts. Many new workers were employed and everyone was made to work longer hours. Over the war years industrial production boomed.

- (i) **Small-Scale Industries Predominate:** While factory industries grew steadily after the war, large industries formed only a small segment of the economy. Most of them—about 6 per cent in 1911—were located in Bengal and Bombay. Over the rest of the country, small-scale production continued to predominate. Only a small proportion of the total industrial labor force worked in registered factories 5 per cent in 1911 and 10 per cent in 1931. The rest worked in small workshops and household units often located in alleys and lanes, invisible to the passerby.

In fact in some instances, handicrafts production actually expanded in the twentieth century. This is true even in the case of the hand loom sector of which we have discussed. While cheap machine-made thread wiped out the spinning industry in the nineteenth century, the weavers survived, despite problems. In the twentieth century handloom cloth production expanded steadily almost doubling between 1900 and 1940.

Certain groups of weavers were in better position than others to survive the competition with mill industries. Amongst weavers some produced coarse cloth while others more finer varieties. The coarse cloth was bought by the poor and its demand fluctuated violently. In time of bad harvests and famines, when the rural poor had little to eat, and their cash income disappeared, they could not possibly buy cloth, the demand for the finer varieties bought by the well-to-do was more stable. The rich could buy these even when the poor starved. Famines did not affect the sale of Banarasi or baluchari saris. Moreover, as you have seen, mills could not imitate specialized weaves, Saris with woven borders, or the famous lungis and handkerchiefs of Madras, could not be easily displaced by mill production.

■ MARKET FOR GOODS

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 and the name of the company familiar to the buyer; the label was also to be a mark of quality. When buyers saw 'MADE IN MANCHESTER' written in bold on the label, they were expected to feel confident about buying the cloth.

But labels did not only carry words and texts. They also carried images and were very often beautifully illustrated. If we took at these old labels, we can have some idea of the mind of the manufacturers, their calculation, and the way they appealed to the people.

Images of Indian gods and goddesses regularly appeared on these labels, it was as if the association with gods gave divine approval to the goods being sold. The imprinted image of Krishna or Saraswati was also intended to make the manufacture from a foreign land appear some what familiar to Indian people. By the late nineteenth century, manufactures were printing calendars were used by people who could not read. They were hung in tea shop and in poor people's homes just as much as in offices and middle class apartments. And those who hung the calendars had to see the advertisements. Day after day, through the year. In these calendars once again we see the figure gods being used to sell new products.

EXERCISE

■ VERY SHORT ANSWER TYPE QUESTIONS

1. Who invented the spinning Jenny? What was its function?
2. Name any two inventions that helped to speed up textile industry.
3. What is meant by proto-industrialization?
4. Mention four steps required in the production process in textile industry.
5. Name the first two flourishing industries of England.
6. Name any four industries in which the industrialists preferred manual labor to machine.
7. Name two types of shelters setup for homeless laborers.
8. How did Armenian and Persian merchants carry goods from India in Pre-colonial period?
9. Name two Indian seaports from which a vibrant trade was carried out from India with south East Asian parts.
10. Why were there clashes between the Indian weavers and company Gomasthas?
11. When and where was the first jute mill set in India?
12. Where and by whom was the first Jute mill setup in India?
13. Name the Indian entrepreneur who set up six joint stock companies in India in 1830s and 1840s. How did he make fortune for investments?
14. Mention the restrictions imposed upon the Indian merchants in 19th century.
15. What is Flying Shuttle? What was its function?
16. How did Indian advertisement become a vehicle of nationalist aspiration?
17. Why were the images of Indian Gods and Goddesses imprinted on British manufacturers in 19th century?

■ SHORT ANSWER TYPE QUESTIONS

18. Explain the role of a guild in the production process of crafts.
19. How did factory production begin in England?
20. Explain two reasons for the fast growth of cotton and steel industry in 18th century England.
21. Why were some industrialists reluctant to introduce machines?
22. Why did the bourgeoisie prefer handmade products in 19th century?
23. After 1840s the life of workers improved in England. Explain.
24. Why is it necessary to use advertisement for various products?
25. Examine the nature of the network of Indian. Export trade before 1750.
26. Examine how the British companies gradually asserted monopoly rights in India.
27. What role did a Jobber play for an industrialist?
28. How did Indian entrepreneurs accumulate capital for investment?
29. What is meant by Enclosure movement?
30. Mention the role of middle class as shown time to time.
31. Write down some of the miserable conditions of workers.
32. Mention the social effects of unplanned industrial towns.

■ LONG ANSWER TYPE QUESTIONS

1. How was the life of Indian weavers affected by Indian trade under company rule?
2. Explain the reasons for decline of Indian textile industry by the end of 19th century.
3. Explain the various problems faced by the Indian weavers in 19th century.
4. Name any three managing agencies in India before the First World War. What were their main functions?
5. How did the pattern of Indian industry change in early 20th century?
6. Why was there a need for economic reform? Explain.
7. What do you know regarding the awakening among workers?

8. Explain the causes of India's industrial backwardness under the British rule.
9. How the British rule hampered Indian industries.

PRINT CULTURE & THE MODERN WORLD

■ IMPORTANT TERMS

- **Calligraphy:** Decorative writing: Art of writing beautifully using fine pen ink, etc.
- **Autobiography:** Story of one's own life written by the author himself or herself.
- **Anthology:** Collection of passage from literature, especially poetry and song.
- **Scribes:** Ancient & medieval copyist of manuscripts.
- **Manuscripts:** Book or document written by hand; authors original copy hand written or typed, not printed.
- **Vellum:** Fine parchment originally from skin of calf or other animal. Manuscript written on this.
- **Parchment:** Skin of animal like goat or sheep specially prepared for writing, painting etc.
- **Foliage:** Leaves, Leafage.
- **Compositors:** One who setup type for printing.
- **Ballad:** Sentimental song with repeated melody; poem or song in short stanzas narrating a popular story.
- **Tavern:** Inn or public house where people gather for a drink.
- **New Testament:** Part of Bible concerned with teaching of Christ and his earliest followers.
- **Protestant Reformation movement:** A movement of protest against the corrupt practices of the Catholic Church, the movement was led by Martin Luther a German monk.
- **Chapbooks:** Cheap pocket size books available at roadside shops of books.
- **Lithography:** A process of printing from stone or metal surface so that the ink address only to the design requested to be printed.
- **Vernacular Language:** Language or dialect of the country, language spoken by a particular clan or group.

■ THE FIRST PRINTED BOOKS

The imperial state in China was, for a very long time, the major producer of printed material. China possessed a huge bureaucratic system which recruited its personnel through civil service examinations. Textbooks for this examination were printed in vast numbers under the sponsorship of the imperial state. From the sixteenth century, the number of examination candidates went up and that increased the volume of print.

This new reading culture was accompanied by a new technology. Western printing techniques and mechanical presses were imported in the late nineteenth century as Western powers established their out posts in China. Shanghai became the hub of the new print culture, catering to the Western-style schools. From hand printing there was now a gradual shift to mechanical printing.

- **Print in Japan :** Printing of visual material led to interesting publishing practices. In the late eighteenth century, in the flourishing urban circles at Edo (later to be known as Tokyo), illustrated collections of paintings depicted an elegant urban culture, involving artists, courtesans, and teahouse gatherings. Libraries and bookstores were packed with hand-printed material of various types-books on women, instruments, calculations, tea ceremony, flower arrangements, proper etiquette, cooking and famous places.

■ PRINT COMES TO EUROPE

The Production of handwritten manuscripts could not satisfy the ever-increasing demand for books. Copying was an expensive, laborious and time-consuming business. Manuscripts were fragile, awkward to handle, and could not be carried around or read easily, their circulation therefore remained limited. With the growing demand for books, wood block printing gradually became more and more popular. By the early fifteenth century, woodblocks were

being widely used in Europe to print textiles, playing cards, and religious pictures with simple, brief texts. There was clearly a great need for even quicker and cheaper reproduction of texts. This could only be with the invention of a new print technology. The breakthrough occurred at Strasbourg where Johann Gutenberg developed the first-known printing press in the 1430s.

- **Gutenberg and the Printing Press:** Gutenberg adapted existing technology to design his innovation. The olive press provided the model for the printing press and moulds were used for casting the metal types for the letters of the alphabet. By 1448, Gutenberg perfected the system. The first book he printed was the Bible, About 180 copies were printed and it took three years to produce them. By the standards of the time this was fast production. In the hundred years between 1450 and 1550, printing presses were set-up in most countries of Europe. Printers from Germany traveled to other countries, seeking work and helping start new presses. As the number of printing presses grew, book production boomed. The second half of the fifteenth century saw 20 million copies of printed books flooding the markets in Europe. The number went up in the sixteenth century to about 200 million copies.

■ THE PRINTING REVELUTION AND ITS IMPACT

- (i) **A New Reading Public:** Access to books created a new culture of reading. Earlier, reading was restricted; to the elites. Common people lived in a world of oral culture. They heard sacred texts read out, ballads recited, and folk tales narrated. Knowledge was transferred orally. People collectively heard a story or saw a performance they did not read a book individually and silently. Before the age of print books were not only expensive but they could not be produced in sufficient numbers. Now books could reach out to wider sections of people. If earlier there was a hearing public, now a reading public came into being. But the transition was not so simple. Books could be read only to the literate and the rates of literacy in most European countries were very low till the twentieth century. How then, could publishers persuade the common people to welcome the printed book? To do this, they had to keep in mind the wider reach of the printed work, even those who did not read could certainly enjoy listening to books being read out. So printers began publishing popular ballads and folk tales, and such books would be profusely illustrated with pictures. These, were then sung and recited at gatherings in villagers and in taverns in towns.
- (ii) **Religions: Debates and the Fear of Print:** Print created the possibility of wide circulation of ideas and introduced a new world of debate and discussion. Even those who disagreed with established authorities could now print and circulate their ideas. Through the printed message, they could persuade people to think differently and move them to action. This had significance in different spheres of life. In 1517, the religious reformer Martin Luther wrote ninety Five. These criticizing many of the practices and rituals of the Roman Catholic Church. A printed copy of this was pasted on a church door in Wittenberg. It challenged the Church to debate his ideas. Luther's writings were immediately reproduced in numbers and read widely. This lead to a division within the Church and to the beginning of the Protestant Reformation. Luther's translation of the New Testament sold 5,000 copies with I a few weeks and a second edition appeared within three months. Deeply grateful to print Luther said, Printing is the ultimate gift of God and the greatest.
- (iii) **Print and Dissent:** In the sixteenth century. Manocchio, a miller in Italy, he reinterpreted the message of the Bible and formulated a view of God and Creation changed the Roman Catholic Church. When the Roman Church began its inquisition to repress heretical ideas. Manocchio was hauled up twice and ultimately executed. The Roman Church, troubled by such effects of popular readings and questioning of faith, imposed severe count over publishers and booksellers and began to maintain an index prohibited Books from 1558.

■ THE READING MANIA

The seventeenth and eighteenth century's literacy rates went most parts of Europe. Churches of different denominations set up schools in village, carrying literacy to peasants and artisans the end of the eighteenth century, in some parts of Europe literacy rates were as high as 60 to 80 percent. As literacy and schools spread in European countries, there was a virtual reading mania. People wanted books to read and printers produced books in ever increasing numbers.

New forms of popular literature appeared in print, targeting new audiences. Booksellers employed peddlers who roamed around villages, carrying little books for sale. There were almanacs of ritual calendars, along with ballads and folktales. But other form of reading matter, largely for entertainment to reach ordinary readers as well. In England, penny chapbooks were carried by petty peddlers known as chapmen, and sold for a penny, so that even the poor could buy them. In France, were the Biliotheque Blue, which were low priced small books printed on poor quality paper and bound in cheap blue covers. Then there the romances, printed on four to six pages and the more substantial histories which were stories about the past. Books were of various sizes, serving many different purposes and interests.

There can be no doubt that print helped the spread of ideas. But we must remember that people did not read just one kind of literature. If they read the ideas of Voltaire and Rousseau, they were also exposed to monarchical and Church propaganda. They were not influenced directly by everything they read or saw. They accepted some ideas and rejected others. They interpreted things their own way. Print did not directly shape their mind but it did open up the possibility of thinking differently.

■ THE NINETEENTH CENTURY

(iv) **Children, Women and Workers:** A children's press, devoted to literature for children alone, was set up in Germany spend years compiling traditional folk tales gathered from peasants. What they collected was edited before the stories were published in a collection in 1812. Anything that was considered unsuitable for children or would appear vulgar to the elites, was not included in the published version. Rural folk tales thus acquired a new form. In this way print recorded old tales but also changed them.

When novels began to be written in the nineteenth century, women were seen as important readers. Some of the best known novelists were women. Jane Austen, the Bronte sisters, George Eliot. Their writings became important in defining a new type of woman; a person with will, strength of personality, determination and the power to think.

In the nineteenth century, lending libraries in England became instruments for education white-collar workers, artisans and lower middle class people. Sometimes self educated working class people wrote for themselves. After the working day was gradually shortened from the mid-nineteenth century, workers had some time for self-improvement self-expression. They wrote political tracts and autobiographies in large numbers.

(v) **Further innovations:** By the mid-nineteenth century, Richard M. Hoe of New York had perfected the power driven cylindrical press. This was capable of printing 8,000 sheets per hour. This press was particularly useful for printing newspapers. In the late nineteenth century, the offset press was developed which could print up to six colors at a time. From the turn of the twentieth century, electrically operated presses accelerated printing operations. A series of other developments followed. Methods of feeding paper reels and photoelectric controls of the color register were introduced; the accumulation of several individual mechanical improvements transformed the appearance of printed texts.

Nineteenth century periodicals serialized important novels, which gave birth to a particular way of writing novels. In the 1920s in England, popular works were sold in cheap series, called the Shilling Series, The dust cover or the

book jacket is also a twentieth century innovation. With the onset of the Great Depression in the 1930s, publishers feared a decline in book purchases. To sustain buying, they brought out cheap paperback editions,

■ **INDIA AND THE WORLD OF PRINT**

(vi) **Manuscripts before the Age of Print** : India had a very rich and old tradition of

Handwritten manuscripts in Sanskrit, Arabic, Persian, as well as in various Vernacular languages. Manuscripts were copied on palm leaves or on handmade paper. Pages were sometimes beautifully illustrated. They would be either pressed between wooden covers or sewn together to ensure preservation. Manuscripts continued to be produced till well after the introduction of print, down to the late nineteenth century.

Manuscripts were not widely used in everyday life. Even though pre-colonial

Bengal had developed. An extensive network of village primary schools, students very often did not read texts. They only learnt to write. Teachers dictated portions of texts from memory and students wrote them down. Many thus became literate without ever actually reading any kinds of texts.

Print Comes to India : The printing press first came to Goa with Portuguese missionaries in the mid-sixteenth century. Jesuit priests learnt Konkani and printed several tracts. By 1674, about 50 books had been printed in the first Malayalam book was printed by them. By 1710, Dutch protestant missionaries had printed 32 Tamil texts. Many of them translations of older works.

The English language press did not grow in India till quite late even though the English East India-Company began to import presses from the late seventeenth century.

Governor General Warren Hastings persecuted Hickey, and encouraged the publication of officially sanctioned newspapers that could counter the flow of information that damaged the image of the colonial government. By the close of the eighteenth century, a number of newspapers and journals appeared in print. There were Indians, too who began to publish Indian newspapers. The first to appear was the weekly Bengal Gazette, brought out by Gangadhar Battacharya.

■ **RELIGIOUS REFORMS AND PUBLIC DEBATES**

This was a time of intense controversies between social and religious reformers and the Hindu orthodoxy over matters like widow immolation, monotheism, Brahmanical priesthood and idolatry. In Bengal, as the debate developed, tracts and newspaper proliferated, circulating a variety of arguments. To reach a wider audience, the ideas were printed in the everyday, spoken language of ordinary people, Ram Mohan Roy published the *Samvad Kaumudi* from 1821 and the Hindu orthodoxy commissioned the *Samachar Chandrika* to oppose his opinion in 1822, two Persian newspapers were published, *Jan-i-Jahan Name* and *Samshul Akhbar*. In the same year, a Gujarati newspaper, the *Bombay Samachar*, made its appearance.

In north India the ulama were deeply anxious about the collapse of Muslim dynasties. They feared that colonial Rulers would encourage conversion, change the Muslim personal laws. To counter this, they used cheap lithographic presses, published Persian and Urdu translations of holy scriptures, and printed religious newspapers and tracts, The Deoband Seminary, founded in 1867, published thousands upon thousands of fatwa's telling Muslim readers how to conduct themselves in their everyday lives, and explaining the meanings of Islamic doctrines. All through the nineteenth century, a number of Muslim sects and seminaries appeared, each with a different interpretation of faith each keen on enlarging its following and countering the influence of its opponents. Urdu print helped them conduct these battles in public, religious texts, therefore, reached a very wide circle of people, encouraging discussions, debates and controversies within and among different religions.

Print did not only stimulate the publication of conflicting opinions amongst communities, but it also connected communities and people in different parts of India. Newspaper conveyed news from one place to other creating pan-Indian identities.

■ NEW FORMS OF PUBLICATION

Other new literary forms also entered the world of reading—lyrics, short stories, essays about social and political matters. In different ways, they reinforced the new emphasis on human lives and intimate feelings, about the political and social rules that shaped such things.

By the end of the nineteenth century, a new visual culture was taking shape. With the setting up of an increasing number of printing processes, visual images could be easily reproduced in multiple copies; Painters like Raja Ravi Verma produced images for mass circulation. Poor wood engravers who made woodblock set up shop near the letterpresses, and were employed by print shops. Cheap prints and calendars, easily available in the bazaar, could be bought even by the poor to decorate the walls of their homes or places of work. These prints began shaping popular ideas about modernity and tradition, religion and politics and society and culture.

- (i) **Women and Print:** Lives and feelings of women began to be written in particularly vivid and intense ways. Women's reading, therefore, increased enormously in middle-class homes. Liberal husbands and father began educating their women folk at home, and sent them to schools when women's schools were swept up to in the cities and towns after the mid-nineteenth century. Many journals began carrying writings by women and explained why women should be educated. They also carried a syllabus and attached suitable reading matter which could be used for home-based schooling.

Since social reforms and novels had already a great interest in women's lives and emotions, there was also an interest in what women would have to say about their own lives. From the 1860s, few Bengali women like Kailashbhashini Debi wrote books highlighting the experiences of women—about how women were optioned at home kept in ignorance, forced to hard domestic about and treated unjustly by the very people they served. In the 1880s, in about the miserable lives upper-caste Hindu women, especially widows.

In Punjab, too, a similar fold literature was widely printed from the early

Twentieth century. Ram Chandra published the fast-selling *Istri Dharm Vichar* to teach women how to be obedient wives. The Khalsa Tract Society published cheap booklets with a similar message. Many of these were in the form of dialogues about the qualities of a good woman.

- (ii) **Print and the poor people:** From the late nineteenth century, issues of caste

Discrimination began to be written about in many printed tracts and essays. Jyotiba Phule the Maratha pioneer of 'low caste' protest movements, wrote about the injustices of the caste system in his *Gulamgiri* (1871). In the twentieth century, B.R. Ambedkar in Maharashtra and E.V. Ramaswamy Nair in Madras, better known as Periyar, wrote powerfully on caste and their writings were read by people all over India. Local protest movements and sects also created a lot of popular journal and tracts criticizing ancient scriptures and envisioning a new and just future.

Workers in factories were too overworked and lacked the education to write much about their experiences. But Kashibaba, a Kanpur mill worker, wrote and published *Chute Aur Bade Ka Sawal* in 1938 to show the links between caste and class exploitation. The poems of other Kanpur mill workers, who write under the name of Sudarshan Chakra between 1935 and 1955, were brought together and published in a collection called *Sachi-Kavitayan*. By the 1930s Bangalore cotton mill workers set up libraries to educate themselves, following the example of Bombay workers. These were sponsored by social reformers who tried to restrict excessive drinking among them, to bring literacy and sometimes to propagate the message of nationalism.

■ PRINT AND CENSORSHIP

By the 1820s the Calcutta Supreme Court passed certain regulations to control press freedom and the Company began encouraging publications of newspapers that would celebrate British rule. In 1835, faced with urgent petitions by editors of English and vernacular newspapers, Governor-General Bentinck agreed to revise press laws. Thomas Macaulay a liberal colonial official formulated new rules that restored the earlier freedoms.

After the revolt of 1857, the attitude to freedom of the press changed. Enlarged Englishmen demanded a clamp down on the 'native' press. As vernacular newspaper became assertively nationalist, the colonial government began debating measures of stringent control. In 1878, the Vernacular Press Act was Passed, modeled on the Irish Press Laws. It provided the government with extensive rights to censor reports and editorial in the vernacular press, From now on the government kept regular track of the vernacular newspapers published in different provinces. When a report was judged as seditious, the newspaper was warned, and if the warning was ignored, the press was liable to be seized and the printing machinery confiscated.

EXERCISE

■ VERY SHORT ANSWER TYPE QUESTIONS

1. What is calligraphy?
2. How was the use of print diversified in 17th century China?
3. When and by whom was the hand printing technology was introduced in Japan?
4. Who was Marco polo? What did the Italians learn from him regarding printing?
5. What is referred to as wood block printing?
6. Who was Johann Gutenberg? What was his main contribution?
7. What was the first printed book after the invention of the printing press? How many copies of book were printed in first three years?
8. What is meant by print revolution?
9. How did the printing press bring change in reading culture?
10. Why well the printed books popular even among literate people?
11. Why were some people scared about printed books?
12. Mention any two strategies adopted by printers and publishers to sell their books?
13. Why were manuscripts not used widely in everyday life?
14. By whom and in which part of India was the first printing press set up?
15. Name the first weekly paper published in India? By whom was it brought out?
16. Name two Persian newspapers published in India 1822.
17. Name first two mill workers who published books written by them in 20th century?
18. Name two governor generals who passed laws to give greater freedom to press?
19. Why did the British government in India try to champ the press?
20. Are the new painters better than the previous one?

■ SHORT ANSWER TYPE QUESTIONS

1. Where did the earliest form of paint technology develop? How were the early books printed?
2. Describe the roll of scribes in the production of books in early medieval period?
3. Explain the factors responsible for the invention of new printing technology.
4. How did Gutenberg use his early experience in inventing printing press?
5. How did the knowledge of printing spared to all parts of Europe? What were its effects?
6. Describe the main features of the first printed Bible?
7. What was the impact of Print Revolution?
8. What were the main effects of the invention of Printing press?
9. Before the age of print, how did the common people learn about the sacred texts?
10. When was the first children' press set up? What were its affects?
11. What role did lending libraries play in educating comment people in 19th century?
12. Examine the various innovations in print technology in late 19th century and early 20th century?
13. Examine the role of missionaries in the growth of press in India?
14. How did religious texts encourage religions debates and discussion?
15. How did the ancient Indian copy and preserve manuscripts?
16. Why the British government curtailed the freedom of press?
17. How press is helpful in social and religious reform movement?

■ LONG ANSWER TYPE QUESTIONS

1. Examine the reasons for a virtual reading 'mania' in Europe in 18th century?
2. To what extent did the print culture create conditions for the spread of revolutionary ideas before the French Revolution of 1789?
3. How did the print technology help to being about a new intellectual atmosphere in Europe and help Martin? Luther in the Reformation movement?

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4. Discuss the impact of mass media on culture?
 5. What are the factors which do or can, act against the independence of mass media?
 6. What measures has been taken to tackle the issue o communication imperialism by the UNO?