

INDIAN SCHOOL AL WADI AL KABIR

Class: X	Department: Social Science	Sub: History
Chapter-4 Question Bank:4	Topic: The Age Of Industrialisation	Year: 2022-2023

What does publisher E.T. Paul want to convey by the picture 'Dawn of the Century' on the cover page of his music book?

Ans:

- Glorification of machines and technology.
- At the center of the picture is a goddess-like figure, the angel of progress, bearing the flag of the new century. She is gently perched on a wheel with wings, symbolising time.
- Her (Goddess) flight is taking her into the future. Floating about behind her, are the signs
 of progress railway, camera, machines, printing press and factory.
 This figure thus gives us an account of the modern world that is associated with rapid
 technological change and innovations, machines, factories, railways and steam ships and
 computers.
- What were the obstacles faced by the European merchants in setting up their industries in towns before Industrial Revolution?

OR

"In the seventeenth and eighteenth centuries, merchants from the towns in Europe began moving to countryside". Give reasons

Ans:

- With the expansion of world trade and the acquisition of colonies in different parts of the world the demands of goods began to grow. But the merchants could not expand production in towns.
- Merchants could not expand production in towns because urban crafts and guilds were powerful over there. These guilds were association of producers who trained the crafts people, maintained control over production, regulated competition and prices and restricted the entry of new people into the trade.
- Rulers granted monopoly right to production and trade only to the guilds. It was therefore difficult for new merchants to set up industries in towns.

"In the country side the poor peasants and artisans began working for merchants". Explain OR

Why did the peasants agree to accept advance given by the merchants during the 17th and 18th centuries?

Ans:

3

At the time when open fields were disappearing and commons were being enclosed, poor
peasants who had earlier depended on common lands (gathering their fire wood,
vegetables etc.) had to now look for alternative sources of income. Moreover, many had
tiny plots of land which could not provide work for all members of their household.

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- Under such condition, when merchants came around and offered advances to produce goods for them, peasants and artisans agreed to work for them.
- Thus, peasants could remain in the countryside and continue to cultivate their small plots.
 Income from proto-industrial production supplemented their income from cultivation. It also helped them a fuller use of their family labour resources.
- 4 What is meant by proto-industrialisation? Explain its features.

Ans

This was the early phase of industrialisation in Europe and England when there was large-scale industrial production for an international market. This was not based on factories. Many historians refer to this phase of industrialisation as proto-industrialisation.

Features:

- In this system a close relationship developed between the town and the countryside. Merchants were based in towns but the work was done mostly in the countryside
- A merchant clothier in England purchased wool from a wool stapler (A person who sorts
 wool according to its fibre), and carried it to the spinners and the yarn that was spun was
 taken to weavers, fullers and then to dyers. London came to be known as the finishing
 centre because finishing of the cloth was done there before it was sold in the international
 market.
- Goods were produced by a vast number of producers working in their family farms, not in factories. Whole of the family was involved. It allowed peasants a fuller use of their family labour resources.
- At each stage of production spinning, dying etc., 20 to 25 workers were employed by each merchant. This meant that each clothier was controlling hundreds of workers.
- By working for the merchants, workers could remain in the countryside and continue to cultivate their small plots. Income from proto-industrial production supplemented their income from cultivation.
- How did the cotton factories become an intimate part of English landscape in the early 19th century?

OR

"A series of inventions in the 18th century increased the efficacy of each step of production process". How?

OR

What were the causes for increase in the import of raw cotton in the late eighteenth century in Britain? What were its results?

Ans:

- In the late eighteenth century in England a number of cotton factories had been set up. It was the first symbol of new era of 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.
- There were number of inventions in production process i.e., carding, twisting and spinning. These inventions helped each worker to produce more. It also made possible to produce stronger threads and yarn.

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- Till then the cloth production was being done within households. Later Richard Arkwright created the cotton mill. Earlier cloth production was carried in the countryside within village households. But now all the processes i.e., spinning, weaving and dying etc., could be done in a mill under one roof.
- This allowed a more careful supervision over the production process, a watch over quality, and the regulation of labour.
- As a result of above, in the early nineteenth century, factories increasingly became an integral part of the English landscape. New mills were visible everywhere. These were result of the new technology. They concentrated their attention on the mills, almost forgetting the bylanes and the workshops where production still continued.

Explain the main features of industrialisation process of Europe in the 19th Century OR

Describe the main features of the pace of industrial change in Britain in the 19th century. Ans:

- The most important industries in Britain were cotton and metals. Cotton was the leading sector in the first phase of industrialisation up to the 1840s. After cotton, the iron and steel industry led the way because with the expansion of railways, the demand for iron and steel increased rapidly. By 1873 Britain was exporting iron and steel worth about 77 million double the value of its cotton export.
- The new industries could not easily displace traditional industries. Textiles was a dynamic sector, but a large portion of the output was produced not in the factories but outside, within the domestic units.
- The pace of change in the 'traditional, industries was not set by steam-powered cotton or metal industries. Ordinary and small innovations were the basis of growth in many non-mechanized sectors such as food processing, building, glass work, tanning, furniture making and production of implements.
- The technological changes occurred slowly. New technology was expensive and merchants and industrialists were cautious about using it. The machine often broke down and repair was costly.

7 'Technological changes occurred slowly in Britain.' Give three reasons for this. Ans:

- New technology was expensive so the merchants and industrialists were cautious about using it. The machines often went out of order and repair was costly.
- The machines were not as effective as their inventors and manufacturers claimed. For example, take the case of the steam engine. James Watt improved the steam engine produced by Newcomen and patented the new engine in 1781. His friend Mathew Boulton manufactured the new model. But at the beginning of the 19th century, there were no more than 321 steam engines all over England.
- So even the powerful new technology which can increase the productivity manifold was slow to be accepted by the industrialists.

8 Why there was no shortage of human labour in Victorian Britain in the mid-19th century? Explain

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Ans:

- Poor peasants and vagrants moved to cities in large number in search of jobs, waiting for work.
- There was plenty of labor and their wages were low.
- Industrialists had no shortage of labour, so they did not want to introduce machines or large investment.
- 9 Explain with examples that the demand for labourers was seasonal in many industries in Victorian Britain.

OR

"The demand for labour was seasonal in many industries in mid-19th century England". Explain Ans:

- In Victorian Britain, the demand for labourers was seasonal in many industries. For example, Gasworks and breweries were especially busy through the cold months. So they needed more workers to meet their peak demand. Once the winter season was over, the extra employed labour was workless.
- Book-binders and printers, catering to Christmas demand, too needed extra hands before December.
- In all such industries production fluctuated with the season, industrialists usually preferred hand labour employing workers for the season.
- 10 Why do historians agree that the typical workers in the mid-nineteenth century were not a machine operator but the traditional craftsperson and labourer?

OR

"In Victorian Britain the upper classes preferred things produced by hand". Give reasons Ans.

- The demand in the market was often for goods with intricate designs and specific shapes. For example, in Britain 500 varieties of hammers were produced and 45 kinds of axes. These required human skills; not mechanical technology.
- The aristocrats preferred things produced by hand. Hand-made products came to symbolize refinement and class.
- Hand-made products were better finished, individually produced, and carefully designed.
 Machine-made goods were oriented to produce uniform goods to export to the colonies.
- 11 'The abundance of labour in the market affected the lives of workers.' Explain it in the context of 19th century Britain.

OR

How did the abundance of labour in the market affect the lives of the workers in the 19th century, Europe? Explain with examples.

Ans.

• In 19th century Britain, there was no shortage of human labour. Poor peasants and vagrants came to the cities in large numbers in search of jobs. The actual possibility of getting a job depended on their existing network of friendship and kin relations. If someone had a relative or friend in a factory, he could easily get a job. Most of the workers had to wait for weeks or more to get a job. They had to spend nights under

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bridges or in night shelters.

- The work available in most of the industries were seasonal. So, workers had long period without work. After the busy season was over, labourers looked for even odd jobs which till the mid-19th century was difficult to find.
- Wages had increased somewhat in the early nineteenth century. When prices rose sharply
 during the prolonged Napoleonic war, the real value of what the workers earned fell
 significantly, since the same wages could now buy fewer things.
- The income of workers depended not on the wage rate alone, it also depended on the number of days of their work.
- By 1830s, the proportion of unemployed went up to 35 and 75 percent in different regions. Fear of unemployment made workers hostile to the introduction of new technology. When the Spinning Jenny was introduced in the woolen industry, women who survived on hand spinning began attacking new machines

What new opportunities were available to workers after 1840s in England? Ans:

- After the 1840s, building activity intensified in the cities, opening up greater opportunities of employment.
- Roads were widened, new railway stations came up, railway lines were extended and drainage and sewers were laid.
- The number of workers employed in the transport industry doubled in the 1840s and doubled again in the subsequent years.

How was the foreign trade from India conducted before the age of machine industries? Explain. Ans:

- Silk and cotton goods from India dominated the international market in textiles.
- Coarser cottons were produced in many countries but Indian cottons were of finer varieties.
- 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 ports i.e., Surat, Masulipatam and Hoogly.
- A variety of Indian merchants and bankers were involved in this network of export trade –
 financing production, carrying goods and supplying exporters. They gave advances to
 weavers, procured the woven cloth from weaving villages, and carried the supply to the
 ports. At the port, the big shippers and export merchants had brokers who negotiated the
 price and bought goods from the supply merchants.

Explain the role of Indian merchants and bankers in the network of export trade before the Industrial Revolution?

Ans:

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By the 1750s the network of trade controlled by Indian merchants, was breaking down". Explain

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OR

Why did the network of export trade in textiles that was controlled by Indian merchants, break down by the 1750s? What were its effects?

OR

"The port of Surat and Hoogly declined by the end of 18th Century". State reason Ans:

Causes:

- The European companies gained power by securing a variety of concessions from local courts (rulers or officials).
- They got the monopoly rights to trade.
- European companies started their operations from new ports of Bombay and Calcutta.
- Trade through the new ports was controlled by the European companies and was carried in European ships.

Effects:

- Old ports of Surat and Hoogly declined and Calcutta grew.
- Exports from these ports fell, the credit that had financed the earlier trade dried up and the local bankers went bankrupt. The gross value of trade at Surat fell from Rs. 16 million in the last years of the seventeenth century to Rs. 3 million in 1740s.
- Export from Bombay and Calcutta grew with the growth of colonial power. Trade was now controlled by European companies and was carried out in European ships.
- It also led to collapse of old trading houses.
- How did East India Company ensure regular supply of cotton and silk goods from Indian weavers? Explain.

OR

How did East India Company develop a system of management and control that would eliminate competition, control costs, and ensure regular supplies of cotton and silk goods? What were its results?

Ans:

Before establishing political power, the East India Company had found it difficult to ensure regular supply of goods for exports due to tough competition with the French, Dutch, Portuguese and local traders. The weaver and the supply merchants used to sell the produce to the best buyer. But once the company established political power, it could assert a monopoly right to trade. Therefore, the East India Company took the following steps:

- It appointed a paid servant called the gomastha to supervise weavers, collect supplies, and examine the quality of cloth.
- It prevented Company weaver from dealing with other buyers by system of advances because the weavers who took loans or advances had to hand over the cloth they produced to the gomastha and not to any other trader.

Results:

The condition of weavers became bad. They took advances to earn more. In the process they had to devote all their time to weaving and had to lease out their small plots of land. The weavers had to sell their cloth only to the Company. They could not bargain. The prices they got were low and

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the advances tied there to the Company. At many places' weavers deserted villages and migrated to other villages. Some weavers refused loans, closed down their workshops and took to agricultural labour.

Explain any three reasons for the clashes between the weavers and the gomasthas.

OR

Who were gomasthas? How did they become good partners of the British management system. Ans:

Gomastha was a paid servant of the East India Company. After establishing their political power, the company could assert a monopoly right to trade, developed a system of management and control that would eliminate competition, and ensure regular supplies of cotton and silk goods.

Various steps were taken by the Company to achieve its objects.

- In order to eliminate the existing traders and brokers in the cloth trade, and establish a more direct control over the weaver, Gomastha was appointed to supervise weavers, collect supplies and examine the quality of cloth.
- Gomasthas became good partners of the British management system because the weavers who took loans from the Company had to handover the cloth they produced to gomasthas. They could not sell it to any other trader.

Soon, however, in many weaving villages there were clashes between weavers and gomasthas due to the reasons as mentioned below:

- Earlier supply merchants very often lived within the weaving villages. They used to help the weavers in times of crisis. Therefore, there were good relations between them.
- The new gomasthas were outsiders. They had no social link with the village.
- Gomasthas acted arrogantly. They punished weavers for delay in supply. They often beat and flogged them.
- The weavers could not bargain for prices or sell to different buyers and the price paid by the Company was low.
- As a result, at many places like Carnatic and Bengal weavers deserted villages and migrated to other villages. Some weavers refused loans, closed down their workshops and took to agricultural labour.
- By the beginning of the nineteenth century why was there a long decline of textile exports from India? Explain.

OR

After the industrial development in England, what steps were taken by the British government to prevent competition with the Indian textiles?

In 1772, Henary Patullo, a company official, had ventured to say that the demand for Indian textiles could never reduce, since no other nation produced goods of the same quality. Yet by the beginning of the 19th century there was a long decline of textile exports from India.

The reasons for this were as mentioned below:

• With the development of cotton industries in England the government-imposed import duties on cotton textiles so that Manchester goods could sell in Britain without facing any competition from outside.

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- 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 piecegoods into India. But by 1870s it was over 50 percent.
- 19 Why did Indian businessmen/manufacturers avoid competing with Manchester goods in the Indian markets? Explain the reasons.

OR

Explain the impacts of Manchester imports on the weavers of India Ans:

At the end of the eighteenth century, there was virtually no import of cotton piece-goods into India but by 1870 it was over 50 per cent. The Indian businessmen/manufacturers avoided competing with Manchester goods due to the reasons as mentioned below:

- The export market collapsed, the local market shrank and was filled with Manchester imports.
- Produced by machines at lower costs, the imported cotton goods were very cheap that the weavers could not easily compete with them.
- During the American Civil War, Britain could not get cotton supplies from the US. Thus, raw cotton was exported from India to Britain. As a result of this, the Indian weavers could not get sufficient supply of raw cotton of good quality and sometimes, they were forced to buy at high prices.
- By the end of 19th century, weavers faced yet another problem-factories in India began production, flooding the market with machine goods.

20 Give an account of the development of factories in India Ans:

- In 1854, the first cotton mill in Bombay set up and went into production two years later.
- By 1862 four more mills were set up and around the same time jute mills came up in Bengal.
- The first jute mill was set up in 1855 and another one after seven years in 1862.
- In the 1860s, in north India, the Elgin Mill was started in Kanpur, 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.

21 Mention the names of early Indian Entrepreneurs and their individual contribution during the 19th century.

- In Bengal, Dwarkanath Tagore invested in shipping, banking etc. and set up six joint-stock companies. He traded with China also. But later his business sank along with those of others in the wider business crises of the 1840s.
- In Bombay, Parsis like Dinshaw Petit and J N Tata earn wealth through exports to China and also through raw cotton shipments to England.
- Seth Hukumchand, a Marwari businessman set up the first Indian jute mill in Calcutta and

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also traded with China. Father as well as the grandfather of the famous industrialist G.D. Birla also did the same. 22 How did Indian Entrepreneurs accumulate capital for investment? Ans: Many Indian entrepreneurs earned huge capital from China trade- the trading of opium to China and taking tea from China to England. The Company employed many Indians as junior players in this trade, providing finance, procuring supplies etc. Having earned some wealth through trade, businessmen had vision of developing industries in India. In Bombay, Parsis like Dinshaw Petit and J N Tata accumulated initial wealth partly from exports to China and partly from raw cotton shipments to England. • Capital was also accumulated through other trade networks. Some merchants from Madras traded with Burma and also had links with Middle East and East Africa. 23 Explain the restrictions imposed by the British government upon the Indian merchants in the 19th century? Ans: The functioning of the Indian merchants was limited. For example, they were barred from trading with Europe in manufactured goods. The Indian merchants could export mostly raw materials and food grains like raw cotton, opium, wheat and indigo which were needed by the British. Gradually, shipping business was controlled by the European companies and Indian merchants were edged out of this business. The European merchant-industrialists had their own chambers of commerce which Indian businessmen were not allowed to join. 24 What was the condition of Indian industries at the time of the First World War? Ans: A large sector of Indian industries was controlled by European Managing Agencies like Bird Heiglers & Co., Andrew Yule, and Jardine Skinner & Co. These Agencies mobilized capital, set up joint-stock companies and managed them. In most instances, Indian financiers provided the capital while the European Agencies made all investment and business decisions. The European merchant-industrialists had their own chambers of commerce which Indian businessmen were not allowed to join. 25 Where did the workers come from to work in factories in India? Ans: With the expansion of factories, the demand for workers increased. In most industrial regions the workers came from the districts around because peasants and artisans who found no work in the village went to the industrial centers in search of work. For example, in the Bombay cotton industries in 1911, over 50 per cent workers came from the neighbouring district of Ratnagiri, while Kanpur mills got their workers

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from Kanpur district.

• Sometimes, workers came from distant places in search of work in the mills. For example, many workers from the United Provinces went to work in the textile mills of Bombay and in the jute mills of Calcutta.

26 Who was a jobber? Describe his functions and position.

Ans:

Jobber was a person who was employed by the industrialists to get new recruits. He was generally an old and trusted worker.

Functions and position of a jobber:

- His main function was to get new recruits.
- He generally got people from his village and ensured them jobs.
- He helped them settle in the city and provided them money in times of crisis.
- He was a person with some authority and power.
- He often began demanding money and gifts for his favour and controlling the lives of workers. For example, Vasant Parkar, a millworker said, "The workers would pay the jobbers money to get their sons work in the mill."

27 Describe major peculiarities of industrial growth in India in the 19th century.

Ans:

- European Managing Agencies dominated the industrial production in India and these agencies were interested in certain kind of products only.
- They established tea and coffee plantations, acquiring land at cheap rates from the colonial government. They invested in mining, indigo and jute. These products were required primarily for export trade and not for sale in India.
- When Indians set up industries they avoided competition with Manchester goods in the Indian market. So, the early cotton mills in India produced coarse cotton yarn rather than fabric. This yarn was used by handloom weavers in India or exported to China.

How a series of changes affected the pattern of industrialisation by the first decade of the 20th century?

Ans:

- During Swadeshi Movement, people boycotted foreign cloth.
- Industrial groups put pressure on the government to increase tariff protection and grant other concessions.
- From 1906, Chinese market was flooded with Chinese and Japanese mills' products. This resulted in decline of export of Indian yarn to China.
- As a result, Indian industrialists shifted from yam to cloth production. Thus, cotton goods production in India doubled between 1900 and 1912.

29 Explain the impact of First World War on Indian industries. Why did the Indian industrial growth suddenly shoot up in the years after the First World War? Ans:

• As the British mills were busy with war production to meet the needs of the army,

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Manchester (British goods) imports into India declined.

- Indian mills got a vast home market to supply.
- As the war prolonged, Indian factories were called upon to supply war needs i.e., jute bags, tents, leather goods etc.
- New factories were set up to meet above needs.
- Multiple shifts were run in the factories.
- New workers were employed and they were asked to work for extra-hours.
 The above factors led to increase in industrial production during the First World War.

Effects:

- In Britain cotton production collapsed and export of cotton cloth fell dramatically.
- As Britain was unable to modernize and compete with the US, Germany and Japan, British economy crumbled.
- Within the colonies, local industrialists had gradually consolidated their position substituting foreign manufacturers and capturing the home markets.
- Give reasons why the handloom weavers in India survived the onslaught of the machine-made textiles of Manchester.

OR

'In the twentieth century, handloom cloth production in India expanded steadily: almost trebling between 1900 and 1940.' How did this happen?

Ans:

- Technological changes: Handicrafts people adopted new technology without excessively pushing up costs. For example, they used fly shuttle. By 1941, over 35 per cent of handlooms in India were fitted with fly shuttles. In regions like Travancore, Madras, Mysore, Cochin, Bengal the proportion was 70 to 80 per cent. Some other small innovations helped weavers to improve their productivity and compete with the mill sector.
- Demand for finer varieties: These were bought by rich and their demand was stable than the coarse qualities because the rich could buy these even when the poor starved. Famines did not affect the sale of Banarasi or Baluchari saris.
- In addition to this, the mills could not imitate specialized weaves. For example, Saris with woven borders, or the famous lungis and handkerchiefs of Madras, could not be easily displaced by mill production.
- However, the weavers and other craftspeople who continued to expand production through the twentieth century, did not necessarily prosper. They lived hard lives and worked long hours. But they were not simply remains of past times in the age of factories. Their life and labour was integral to the process of industrialisation.
- What steps were adopted by the producers in India to expand the market for their goods in the 19th century?

OR

How did the British manufacturers attempt to take over the Indian market with the help of advertisement?

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OR

How were people persuaded to use the new products?

Explain the ways which were adopted to persuade the people to use the new products. Ans:

People were persuaded by the following ways to use the new products:

Advertisements: Advertisements make products appear desirable and shape the minds of people and create new needs. They played an important part in expanding markets for products and in shaping a new consumer culture. Now-a-days the advertisement appear in newspapers, magazines, television screen etc.

Labels: Labels were needed to tell the consumer, the place of manufacture and the name of the company and about the quality of the product. When Manchester industrialists began selling cloth in India they put labels as "MADE IN MANCHESTER" on the cloth bundles which helps the buyer to be familiar about the company and to be confident to buy it. Images of gods and goddesses also appeared on the labels which gave divine approval to the goods being sold. For example, images of Krishna and Saraswathi were imprinted to make manufacture from a foreign land appear somewhat familiar to Indian people.

Printing of calendars: Calendars were also printed to popularise the products and they were used even by the people who could not read. They were hung in tea shops, homes and other places. People see the calendars daily and slowly they were attracted towards that product.

Figures of important persons, emperors etc.: These figures were used to convey the message that if you respect the royal figure, then respect this product too. If the royal person is using a product, its quality cannot be questioned. So, use of a royal figure popularise that product.

Advertisement of nationalist message: In such advertisement, people were told that if you love your country then use that product. Such advertisements were used by Indian manufacturers.

Thus, various ways were adopted to persuade people to buy new products.

Additional Questions

32 'Industrialisation in India was a mixed blessing.' Justify the statement.

Ans

It is true to say that industrialisation in India was a mixed blessing because it had both positive and negative aspects as mentioned below:

- (a) Positive aspects of industrialization:
 - A large number of people got employment in factories. For example, people from the United Provinces went to work in the textile mills of Bombay and in the jute mills of Calcutta.
 - During the First World War new factories were set up and old one ran multiple shifts. Many new workers were employed and everyone was made to work longer hours.
 - People started working in factories. There was migration of people from rural to urban areas. There was now less pressure on agriculture.
- (b) Negative aspects of industrialization:
 - The condition of weavers affected badly. With the arrival of Manchester goods, the local market shrank.
 - There was decline in weaving regions in India.

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• The weavers could not get sufficient supply of raw cotton of good quality.

33. Which inventions helped the cotton textile industry to adopt the factory system Explain? Ans:

In the eighteenth century, many inventions helped the manufactures to adopt factory system.

- Flying shuttle improved the process of hand weaving looms with mechanized and automatic machine looms.
- The Spinning Jenny was a multi-spinal spinning frame which revolutionized the cotton spinning. It enabled workers to produce more yarn in a shorter amount of time.
- Power loom was a mechanized loom powered by a line shaft and was one of the key developments in the industrialization of weaving.
- A very important invention in the industry of textile was spinning frame. It was the first
 powered automatic and continuous textile machine. It enabled to move away from small
 home manufacturing towards factory production. All these machines required a centralized
 place therefore, factory system started taking place for fast production.

34. Explain any five causes of industrial revolution in England. Ans.

- Growing International Market: In the seventeenth and eighteenth centuries, 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.
- Increase in demand: With the expansion of world trade and the acquisition of colonies in different parts of the world, the demand for goods began growing. It was controlled by merchants and the goods were produced by a vast number of producers working within their family farms, not in factories.
- Proto-industrial System: The expansion of market and demand lead to proto-industrial growth which provided a base to Industrial Revolution.
- New Inventions: A series of inventions in the eighteenth century increased the efficacy of each step of the production process (carding, twisting and spinning, and rolling). It enhanced the output per worker, enabling each worker to produce more. Then Richard Arkwright created the cotton mill.
- Availability of Capital: The vast amount of capital which England had accumulated out of profits of her growing trade enabled her to make large expenditure on machinery and buildings. This led to new technological developments.
- Availability of Raw Material: The availability of coal and iron ores in large quantities greatly helped the growth of numerous industries in England.

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