

# Manufacturing Industries Class 10 PDF

## What is Manufacturing?

The process of making a finished product that is ready to sell in the market is called manufacturing, and this procedure can be physical, chemical, or mechanical. Every product that is available in the market for purchase is manufactured somewhere.

Product manufacturing requires machines and equipment and has plants, mills, or factories to produce goods in bulk for the mass and is mostly set up where all the resources are accessible. A healthy and thriving economy can be determined through a healthy manufacturing industry.

## Manufacturing Industries Class 10: Importance of Manufacturing

As stated in the chapter on Manufacturing Industries Class 10, India is a prominent manufacturer of a variety of goods. Let's have a look at the importance of manufacturing industries:

- They reduce the dependency of people on agriculture by generating jobs and by contributing to the modernization of agriculture.
- Industrial development helps in the reduction of unemployment and poverty. Many public sector industries and joint ventures are established and aimed to bring down regional inequalities by starting industries in tribal and backward areas.
- Manufactured goods expand trade and commerce, and its export increases the foreign exchange.
- Transforming raw materials to high valued goods brings prosperity and helps in economic growth.

## Contribution of Industry to National Economy

The manufacturing growth rate trend has been 7 percent per annum from the last few decades, whereas the anticipated growth is 12 percent as per the chapter. The National Manufacturing Competitiveness Council (NMCC) has been set up to put up appropriate policies to improve productivity and achieve the desired target.

## Industrial Location

Industrial locations are influenced by the availability of raw materials, capital, labour, power, and market. Manufacturing industries are set at places where there is the possibility of finding all the factors or arranging at a reasonable cost.

## **Manufacturing Industries Class 10: Classification of Industries**

Class 10 chapter on Manufacturing Industries also elaborates the classification of industries on the basis of production. Here are the major categories:

### **Agro-Based**

- Textile industry contributes significantly to industrial production, employment generation, and foreign exchange earnings. It produces valued products from raw materials.
- Cotton Textile: Traditionally, cotton textiles were produced with hand spinning and hand weaving techniques, but since the use of power looms, the traditional looms faced a setback.
- Jute Textile: India is the largest producer of raw jute and stands as the second place as an exporter. Most of the mills are located in West Bengal because of factors like inexpensive water transport, a good network of roadways, and waterways for the movement of raw materials.
- Sugar Industry: India is the second-highest producer of sugar and the highest producer of gur and Khansari. Most mills are located in Uttar Pradesh, Bihar, Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh because the production of cane in these places has a higher sucrose content.

### **Mineral-Based**

- The Iron and Steel industry is one of the basic industries and falls under the category of heavy, medium, and light. Steel is needed to produce various engineering goods.
- Aluminium Smelting is one of the second most important metallurgical industries in India. It is a popular substitute for steel, copper, zinc and is used in the production of aircraft, utensils, and wire. It is light, corrosion-resistant, and a good conductor of heat. These industries are mostly found in Odisha, West Bengal, Kerala, Uttar Pradesh.
- Chemical Industries comprises both large- and small-scale manufacturing units, the chemical industry is fast-growing and diversifying.
- The Fertilizer Industry is centred around the production of nitrogenous fertilizers, phosphatic fertilizer and ammonium phosphate and complex fertilizers

- Automobile Industry is mostly located in Delhi, Gurgaon, Mumbai, Pune, Chennai, Kolkata, Lucknow, Indore, Bangalore. They provide vehicles for quick transport of passengers and goods.
- Information Technology and Electronic Industry comprise a wide range of products from telephone, transistor to television. Computers and many more are mostly located in Mumbai, Delhi, Hyderabad, Pune, Chennai, Kolkata, Lucknow.

### **On the Basis of their Main Roles:**

- Industries who supply raw materials as products for manufacturing manufacture are known as the basic or key industries.
- Consumer industries that produce products that can be directly consumed.

### **On the Basis of Capital Investment:**

- Small scale industries are defined with reference to the maximum investment permitted on the assets of a unit.

### **On the Basis of Ownership:**

- It is operated by government agencies like BHEL, SAIL, etc.
- Public sector industries are owned or operated by a group of individuals like TISCO, Dabur industries, etc.,
- Joint sector industries are run by groups of individuals and the state like OIL India Ltd.
- Cooperative sector industries are owned and operated by producers or suppliers of raw materials and workers. They share the profit and share and also pool in the resources.

### **Based on the majority and heaviness of raw materials and complete goods:**

- Heavy industries like iron and steel
- Light industries like electrical good industries

## **Manufacturing Industries Class 10: Industrial Pollution and Environmental Degradation**

Industries definitely contribute to the development of the economy of the country but its harmful chemicals also degrade the environment. As stated in the chapter on Manufacturing Industries in class 10, the main pollutants belonging to the industrial sector are:

- Air pollution, caused by the high presence of undesirable gas like sulfur dioxide and carbon monoxide.

- Water pollution, caused by the organic and inorganic industries wastes into rivers.
- Thermal pollution, caused by the hot water that is drained from factories and thermal plants connects to the rivers and ponds by polluting the natural water.
- Noise pollution, caused by industrial construction and machinery factory equipment.

## **Manufacturing Industries Class 10: Control of Environment Degradation**

It is essential to save the environment from degradation. But industrial development is necessary for the growth of the Indian Economy. Thus, industries must work sustainably so that the environment does not get hampered. Here are some of the measure they can adopt:

- Use of minimal water for processing by reusing and recycling it
- Rainwater harvesting
- Treatment of hot water before releasing them into rivers and ponds which can be done by screening, grinding, flocculation and sedimentation
- Recycling of wastewater through biological processes.