

Name of course: BHS-188 Industrial Sociology 3(3-0-0)

Objective:

- To expose students to the major issues and problems of industrial society
- To sensitize students with the strategies to realize the challenges and settle industrial disputes

Course Catalogue

Nature, Scope and Development of Industrial Sociology, Development and Types of productive System and their characteristics, Industrialization, Causes and Consequences of Industrialization in India, Industrial Relation, Industrial Disputes, Grievance Redressal Procedure.

Catalogue description/ Course Outline	No. of Lectures
• Nature of Industrial Sociology: Nature, meaning & definition	2
• Scope & development of Industrial Sociology. Relationship with other Social Sc.	
• Development of industry & types of productivity system	3
• Manorial system, Putting-out system & factory system with their characteristics	2
• Industrial revolution & its impacts	3
• Industrialization in India: History of Industrialization under Colonial rule	3
• Industrialization after Independence, Human factors for Industrialization	3
• Causes & Consequences of Industrialization	3
• Current Problems regarding Industrialization	3
• Industrial Policy Resolutions and Reforms in India	3
• Meaning and objectives of Industrial Policy	2
• Industrial Policy Statements	3
• Industrial Relations & Industrial disputes	3
• Strikes, Labour Courts & Industrial Tribunals	3
• Grievance Redressal Procedure	2
• Code of Discipline	2
Two Pre-final Tests each of 30 Marks	2
Total:	45

Final of 40 Marks

Textbook & References:

1. Singh, Narender, 2011. Industrial Sociology. Tata McGraw Hill Education Pvt Ltd., New Delhi
2. Gisbert, Pascal, 2010. Fundamentals of Industrial Sociology, Orient Black Swan, 3rd Ed
3. Singh, A. P., 2011. Industrial Sociology, New Age Publishers, Delhi
4. Yadav, R. G., 2010. Industrial Sociology, New Royal Book Co.

1.4 IMPORTANCE OF INDUSTRIAL SOCIOLOGY

What is the need of studying industrial sociology? The answer to this question is discussed in the following points which also highlight the significance of industrial sociology:

(i) Insight into the Social Aspect of Industry

Industrial sociology adds an entirely new section of knowledge to human mind. The present industrial society cannot be understood without reference to such knowledge. The labour class has its peculiar status, roles and problems. The problems of the labour class must be addressed to have a lasting peace in industry.

(ii) Use of Scientific Methods

The use of scientific method in industrial sociology helps to find out cause-effect relationships in a particular area. Industrial society requires such a scientific knowledge for understanding. The future of every progressive nation rests upon its industries. Industrial progress is a general index of the progress-

help is therefore necessary for the betterment of employer-employee relationships.

(viii) Problems of Automation

With the progress industrialisation in India, automation is increasing. This has increased unemployment though on the other hand it has increased profits of the industrialists. Therefore, automation has been opposed by many labour unions. The solution of such disputes requires knowledge of industrial sociology.

(ix) Industrial Management

Success in industry depends upon industrial bureaucracy. Efficiency of industrial bureaucracy depends upon scientific industrial management. Therefore, industrial bureaucrats require a training in industrial sociology. This is particularly relevant to present-day Indian conditions.

(x) Social and Labour Welfare

Most of the urban problems are intimately related to labour problems, since the labour class occupies an important status in an industrial society. Therefore, social welfare and labour welfare are intimately connected. Both these require a sound knowledge of industrial sociology.

(xi) Sound Economic Planning

The Indian Government has launched five year plans to bring about planned development of industries and so solve many problems like illiteracy, over population, low level of wages, low productivity of agriculture, absence of trained personnel, pressure of taxes, inflation, black money, corruption etc. All these problems are studied by the industrial sociologists. Their suggestions may be valuable in the solution of these problems.

of industrial sociology is narrow and limited. In industrial sociology, we study only those social relations which either arise due to industrialisation or are

Social Relations in Industry

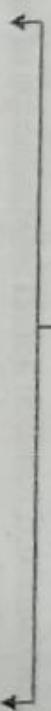


Fig. 1. Scope of Industrial Sociology.

related to industry. As shown in Fig. 1, industrial sociology studies both internal relations and external relations. Internal relations may be (a) formal, (b) informal, and mixed.

Internal Relations

In industrial sociology, we study the interpersonal relations among individuals connected directly with industry. If these relations are confined to a single factory or concern, they are called internal relations. The owner, the managerial staff and the workers of an industrial unit are linked mutually by internal relations. The internal relations are of three kinds : Formal, Informal and Mixed as discussed below :

Formal Relations : The formal relations are those which are established between individuals in an industrial unit on account of their position. The formal relations exclude personal relations. The formal relations are functional and are determined by the hierarchical order in the industrial unit. For example, if two persons are doing the related work, that is, one may be manufacturing a part of a machine while the other is polishing or finishing it, the relations between them would be formal. The official relations between the management and employees are also formal.

Informal Relations : The personal relations among the people in an organisation are called informal relations. Such relations may obtain among individuals or among groups. For example, if there is friendship between two workers of a factory, these relations would be called informal relations. If two or more labourers conspire against the foreman or some other officer, the kind of relationship which comes into being in this way is also informal in nature. Sometimes, factions are formed in a factory and the members are divided because of informal relations. Such relations are based on personal likes and dislikes, tastes, language, attitude, etc.

Mixed or Socio-technical Relations : There are certain relations which are neither purely formal nor purely informal. Such relations are called mixed internal relations. Some scholars have termed these relations as socio-technical.

of a nation. Industrial progress however, requires certain conditions. Besides, it requires solution of industrial problems. Industrial sociology studies institutions of industrial society, their social control, social change, dynamism, inter-action, problems and remedies. Thus, industrial progress is not possible without the knowledge of industrial sociology.)

(iii) Solution to the Problems of Industrial Society

Industrialisation has led to stratification, differentiation, change in status and role and the form of social institutions. All this has resulted into several problems. Besides one has to solve the problems peculiar to industry such as strikes and lockouts, problems of recruitment, problems of accidents and problems of housing, health, sanitation, education, recreation and social security, etc. These industrial problems are intimately concerned with other sections of urban society. The remedies to all these problems require a sound knowledge of industrial sociology.

(iv) Familial Integration

Family as a unit occupies the central position in society. Its disorganisation can lead to social disorganisation. Modern families in urban and industrial areas are gradually disintegrating due to social evils such as prostitution, alcoholism, unhealthy recreation, absence of social control, fast-rate of social mobility, unhealthy conditions of living, inadequate wages, insufficient housing, over-crowding and slums. These problems must be solved to save urban family from disorganisation.

(v) Scientific Division of Labour

In India division of labour has been traditionally based upon caste system. The caste system, however, is now appearing to be an impediment in economic progress. Therefore, effort is being made to eliminate caste system. This has led to disorganisation in division of labour. Any one is now engaged in any profession whatever may be his innate ability. Scientific division of labour in the field of industry requires a fairly wide knowledge concerning different professions. Industrial sociology extends help in this process.

(vi) Rationalisation

Being backward from scientific and industrial viewpoint, India lags in rationalisation in industries. With the progress of education among capitalists and employers and the interference by the government, efforts are now being made for more and more rationalisation in industries. This is helped by industrial sociology.

(vii) Employer-Employee Relationships

Industrial peace and progress depend upon harmonious relationships between the employers and the employees. This requires suitable attention to several factors such as rates of wages, working conditions, behaviour of bureaucracy, security of jobs, provision of housing and scientific method of recruitment etc. All these fall within the scope of industrial sociology whose

1.2 SCOPE OF INDUSTRIAL SOCIOLOGY

Industrial sociology includes industrial sector as a social system, factors influencing it, its structure, roles and factors of change. In brief, industrial sociology is a particular branch of sociology in which the organization, structure, functions and implicit social relationships of industrial and economic systems are studied.

In the words of Amitai Etzioni, "The scope of industrial sociology includes the study of those economic organisations which have the primary aim of producing goods and services, exchanging them, or organizing and manipulating monetary processes."

Miller and Form have described the field as being "concerned broadly with the study of industrial society and also with the analysis of the social organisation of work." It is suggested that industrial sociology deals with all types of work organisations. According to Moore, "Industrial sociology is concerned with the application or development of principles of sociology relevant to the industrial mode of production and the industrial way of life." Schneider delimits the field of industrial sociology to the industrial institutions with a focus on the social structure of large scale manufacturing organisations.

Most of the writers on industrial sociology have covered the following aspects :

- (i) work-group,
- (ii) structure of industrial bureaucracy or internal organisation
- (iii) organisation of trade unions and union-management relations.

Burns has classified the subject-matter of industrial sociology as follows :

(i) Bureaucracy, (ii) Study of functions, (iii) Study of functional groups, (iv) Analysis of industrial relationships, (v) Influence of industrialisation on the individual. According to Miller and Form, the subject-matter of industrial sociology includes work group and interpersonal relationships in it, the role of work groups, the study of machines and instruments in social organisation. Most of American industrial sociologists have adhered to this subject-matter of industrial sociology.

According to C. B. Spaulding, the subject-matter of industrial sociology is industry, industrial organisation, factories, godowns, sale purchase centers, administration and the social relationships of the individuals involved in all these activities. Industrial sociology studies inter-related actions, interactions, methods and processes.

In short, the subject-matter of industrial sociology is the human relations originating in and developing on account of industrialisation. The study of industrial sociology pertains to social relations in industry, though sociology studies the entire gamut of social relationship from a general point of view. The scope of sociology is very wide. On the other hand, the scope

of the workers' representatives. This necessity led to the formation of the All-India Trade Union Congress.

The Trade Unions Act gave legal status to registered trade unions and conferred on them and their members a measure of *immunity from civil suits and criminal prosecution*. The Act gave legal status to unions and enhanced their position in the minds of employers and the general public. This Act was an important landmark in the history of trade union movement in India. The failure of the Bombay Textile Strike of 1929 and the economic depression of that period brought a lull in trade union activity. But industries faced the problem of effective handling of labour-management relations. The managements declared lock-outs to resist pressure by workers while workers resorted to strikes to pressurise managements for higher wage and better facilities. The Government also intervened in many cases to resolve the disputes between the management and workers. This is how the industrial relations system consisting of three actors, i.e., management, workers and government, evolved.

4.5 CONSEQUENCES OF INDUSTRIALISATION

Industrialisation has affected the society in every respect. The customs and traditions, the fashion and manners, the ways and modes of living all have been deeply influenced by industrialisation. The processes of industrialisation are intimately related with scientific processes. Therefore, the attitude of the members of industrial society has become scientific. In an industrial society, the superstitions and blind faiths have no place. People expect and demand rational explanation of every phenomenon. The reason and not faith is the touchstone of every action and belief in the industrial society. The freedom of thought and individualism are the cornerstones of the industrial society. Because of industrialisation, the methods and means of social control have changed. The ancient institutions of marriage and family have also changed. The old values and rules pertaining to religion and morals are undergoing radical changes. The new patterns of social stratification are being established. The caste system is being replaced by the class system. Even the means of recreation and entertainment have undergone change in the industrial urban society. Thus, it is obvious that industrialisation has influenced almost every aspect of society.

Impact of Industrialisation on Marriage

The institutions of marriage and family are to be found in every society. Traditionally the Indian society has recognized marriage to be a sacred and religious institution but in the modern industrial society it has been reduced to a contract. In the past, marriage was considered to be a permanent and inalienable bond which could not be terminated at will. But now, under the

impact of industrialisation, divorces are not uncommon. The following discussion will make explicit the impact of industrialisation upon the institution of marriage:

- (i) **Marriage as a Social Contract** : Traditionally, marriage in India was considered to be a religious and sacred institution. It was commonly believed by the Hindus that marriage is necessary for emancipation or salvation. Besides, marriage was regarded to be a permanent bond. Marriages were supposed to be made in heaven and only God could sever a marital bond. But with the advance of industrialisation, these beliefs are considered superstitious and anyone holding them is frowned upon. Today marriage is regarded as a social contract between a man and a woman by many people. The aim of marriage in modern times has ceased to be spiritual and now its aims are economic, social and biological mainly.
- (ii) **Higher Age of Marriage** : In the Indian society only a few decades back, child-marriages were quite common. But with the industrialisation, the age of marriage is advancing; it is getting higher and higher over the years. In metropolitan towns of India boys and girls are generally marrying at the age of 25 to 35.
- (iii) **Practice of Non-marrying** : As a consequence of rejection of the traditional beliefs and attitudes many young men and women in big towns prefer to live single. According to their thinking and beliefs, the major need filled by marriage is biological and this can be easily satisfied out of wed-lock.
- (iv) **Practice of Love Marriages** : In mills, factories, offices and other places, both men and women work together. Under these circumstances they get a chance of coming together, meeting and exchanging ideas and opinions. As a result, individuals become intimate and the intimacy becomes love which ultimately blossoms in marriage.
- (v) **Increase in Divorce Rate** : The industrial society is becoming more and more complex. The philosophy of individualism is flourishing in the society. Even husband and wife have different outlooks and attitudes. Both of them work in separate social spheres. As a result of this, marital bonds are getting weaker. The mental conflict increases and the situation of divorce develops.

Impact of Industrialisation on Family

Besides affecting the institution of marriage, industrialisation produces effects upon the institution of family. Some of the important effects of industrialisation upon family are as under :

- (i) **Role of Family** : As a result of industrialisation, the role of family has changed considerably. Now a number of functions which used to be performed by families in the past have been taken over by

fullest. Besides, mechanisation of industry rendered this system absolute and economically non-viable. The capitalist by investing huge amounts into industry and mechanising it to the hilt completely ruined the domestic system.

5.2 INDUSTRY DURING THE MUGHAL PERIOD

In the reign of Akbar and Jahangir, industry was given greater importance. During the reign of these rulers, India was famous world over for its industrial products. At this time spices, cloth and indigo used to be exported to Europe from India. The Muslin of Dacca was world-renowned. A number of industrial centres had sprung up at this time from which goods used to be exported to several countries.

Under the Mughals, industry in India was quite widespread. There were industrial centres in rural as well as urban areas. The aim of the industry in rural areas was mostly to cater to needs of local people. The goods of daily need were available in villages. The industry in urban areas was highly developed and was carried on a vast scale. The primary aim of industry in towns was to produce fine quality goods for the purposes of export. The industry at this period was not privately owned but was under the control of guilds. At certain places middle-men used to play a role. They middle-men used to pay in advance for the goods needed by them.

After the Mughals there began a gradual decline and deterioration of the traditional Indian industry. The chief reason for this decline was the industrial revolution in the West. As a result of the industrial revolution, the pattern and nature of industrial production in England underwent such a change that the demand there for the Indian goods completely dried up. There were a number of reasons for this radical change. Firstly industry in England was becoming highly mechanised. The mechanisation led to an increase in the production and also improvement in the quality of goods. Thus there was competition between machine-made foreign goods and hand-made Indian goods. The machine made goods were cheap, standard and available in bulk. For pretty obvious reasons Indian goods failed to compete with their Western counterparts. The result was that there was steep decline in the demand for Indian products which, in turn, led to closure of many manufacturing units. Many of the skilled Indian craftsmen took to job under foreign controlled companies.

5.3 IMPACT OF INDUSTRIAL REVOLUTION

After the industrial revolution in the west, the Indian industry lost its ground substantially. Industrial activity on modern lines picked up after the British took over the reigns in India. Between 1850-60, jute mills were set up.

In the beginning, rail track between mining centres in Bihar and Calcutta were laid. Along with the development of means of communication there was rapid industrial growth in India. About this time foreign merchants established textile mills in Bombay and Ahmedabad. In Kanpur woolen and leather factories were established. These factories were under British ownership though the raw material was supplied by Indians and the labour working in these factories was also Indian. The profit was made by the British at the expense of Indians.

The British Government used to export the raw materials from India and import into India the finished goods at exorbitant prices. The Britishers had little sympathy for the development of local industry. In 1911, Jamshedji Tata ushered in an era of Indian industrial revolution by setting up a steel mill in Jamshedpur. However, its production was not adequate to meet the local of communication and the production of coal and iron ore. On the whole, however, Indian industry was backward.

In the First World War, the British had to suffer and face grave difficulties on account of the undeveloped state of Indian industry. The situation arose where the sea-routes were blocked and it became impossible to export raw materials from India and to import finished goods into India. On account of this the army based in India was put to great hardships. Therefore, after the war, the British encouraged setting up industries in India.

Industrial Revolution and India

In India, industrialisation started in the second half of the 19th century. But on account of political dependence, it proved to be haphazard and lopsided. Even upto 1914, we did not have any basic or key industries and the so-called producer's goods industries. We had, of course, many consumer goods industries such as cotton textile industry. Unfortunately, we were required to import all kinds of manufactured goods and machinery and machine tools from abroad till our independence.

It was after independence that the Central government laid the foundation of industrialisation by setting up core and producers' goods industries in the public sector and starting development financial institutions for the encouragement of industries in the private sector. As a result, there has been tremendous growth in iron and steel, oil refineries, heavy electrical, fertilizers, chemical and ship building industries. Recently, we have seen the exemplary growth of the information technology (IT) sector in India.

5.4 INDUSTRIALISATION AFTER INDEPENDENCE

After independence, industrialisation got a big boost particularly after the announcement of Industrial Policy Resolution, 1956. The Central government took over the 'commanding heights of the economy.' This involved

3.14

England was the centre of the Industrial Revolution. The new economy was completely different from what it replaced. Before industrialisation, agriculture and textiles were the chief occupations of the British. Most people lived in villages. Like in our own Indian villages, there were peasants and landlords, the blacksmiths and leather workers, the weavers and the potters, the shepherds and the brewers. Society was small. It was hierarchical, i.e. the status and class positions of different people were clearly defined. Like all traditional societies it was also characterised by close interaction. With industrialisation each of these features changed.

One of the most fundamental aspects of the new order was the degradation of labour, the wrenching of work from the protective contexts of guild, village, and family. Both the radical and conservative thinkers were appalled at the decline of the status of the common labourer, not to mention the skilled craftsman.

Urban centres expanded and grew. It was not that there were no cities earlier. But their character prior to industrialisation was different. The industrial cities gave birth to a completely new kind of urban world. It was marked by the congested factories, by *overcrowded slums of the new industrial working class, bad sanitation and general squalor*. It was also marked by new kinds of social interactions.

The factory and its mechanical division of labour were often seen as a deliberate attempt to destroy the peasant, the artisan, as well as family and local community. The factory was perceived as an archetype of an economic regimentation hitherto known only in barracks and prisons. For some sociologists like Marx the factory was oppressive. Yet potentially liberating. Here workers learnt both collective functioning as well as concerted efforts for better conditions.

Another indicator of the emergence of modern societies was the significance of *clock-time as a basis of social organisation*. A crucial aspect of this was the way in which, in the 18th and 19th centuries, the tempo of agricultural and manufacturing labour increasingly came to be set by the clock and calendar in a way very different from pre-modern forms of work. Prior to the development of industrial capitalism, work-rhythms were set by factors such as the period of daylight, the break between tasks and the constraints of deadlines or other social duties. Factory production implied the synchronisation of labour—it began punctually, had a steady pace and took place for set hours and on particular days of the week. In addition, the clock injected a new urgency to work. For both employer and employee, 'time is now money'.

envisioned by the Planning Commission in the Second Five Year Plan. This Policy Resolution still remains a guiding force for the development of the country even though it has been revised a number of times for the speedy achievement of the national objectives.

In February, 1973, the Government modified the Industrial Policy of 1956 to simplify and rationalise it. Besides the basic objectives of growth-social justice and self-reliance, the new statement sought to improve the investment climate and to encourage growth of priority industries.

6.4 INDUSTRIAL POLICY STATEMENT, 1977

The Janata Government which came to power at the Centre in 1977 was strongly biased against large-scale industries. It advocated the growth of small scale and cottage industries as a remedy to the widespread problems of unemployment and regional inequalities in industrial development. This viewpoint was given concrete shape in the Industrial Policy Statement made by the Government on December 23, 1977.

Emphasis on Cottage and Small-Scale Industries. The main thrust of the 1977 Industrial Policy was on the effective promotion of cottage and small scale industries that were to be widely dispersed over rural areas and small towns. The keynote of the policy was "whatever can be produced by the small scale and cottage industries must only be so produced."

Development of Appropriate Technology: The 1977 policy emphasised the need for developing industrial technology that was appropriate in the Indian context in the sense that it makes more use of the abundant labour resources without compromising efficiency in production. This would ensure larger employment and better use of country's domestic resources.

The Industrial Policy, 1977 also proposed a number of measures to curb disproportionate growth of large business houses, vigorous use of Monopolies and Restrictive Trade Practices (MRTP) Act to curb monopoly power of big industrial houses and dispersal of industries away from the metropolitan areas.

6.5 INDUSTRIAL POLICY STATEMENT, 1980

With the fall of the Janata government and return of the Congress to power, a new Industrial Policy Statement was issued on July 23, 1980 which reiterated the Industrial Policy of 1977 as the framework of industrial development.

This policy sought to check the decline in the industrial growth rate that was caused by the undue emphasis on small scale sector and the virtual neglect of large industries under the previous Industrial Policy of 1977. The Industrial Policy Statement, on 1980 laid down the following objectives:

- (i) Optimum utilisation of installed capacity (ii) Maximising production and productivity and employment generation (iii) Correcting regional

imbalances (iv) Emphasis on cottage and small-scale industries (v) Promotion of export oriented industries.

Besides the above mentioned features, the Industrial Policy Statement of 1980 gave preferential treatment to development of agro-based industries. In essence, this Industrial Policy statement was only a further elucidation of the 1956 Industrial Policy.

INDUSTRIAL LICENSING POLICY

The Industrial Policy lays down the overall objectives of industrial development while the licensing policy provides for the instruments to regulate and guide the programmes of industrialisation to achieve those objectives.

The main aims of industrial licensing are:

- (i) to regulate the development of industries in accordance with the plans of overall economic development,
- (ii) to control monopolistic tendencies and prevent concentration of economic power in a few hands,
- (iii) to protect small scale sector from the competition by the large-scale industries,
- (iv) to achieve dispersal of industries among various regions to promote balanced regional growth, *Scatter Policy*
- (v) to ensure optimum utilisation of scarce capital as well as limited foreign exchange resources, and
- (vi) to encourage development of industries in the industrially backward areas.

Industries (Development and Regulation) Act, 1951

To give concrete shape to its industrial policy, the Government of India enacted the Industries (Development and Regulation) Act in 1951 which laid down the precise manner in which the industries, particularly those in the private sector, were to be regulated. The Act provided that no new industrial units could be set up or substantial expansion made in the existing industrial units without obtaining licence from the government. While granting licence for setting up a new industrial undertaking, the government could lay down the conditions regarding the location of such units, their production capacity, etc.

Flaws in the Licensing System

In a report submitted in 1967, Dr. R.K. Hazari made some serious disclosures about the functioning of the industrial licensing system. The committee found that some leading industrial houses made large number of applications for grant of licences for the same product or for a wide variety of products through multiple companies working under their control. In many

those who own the land and those who work on the other's land. Land is the major source of wealth and is individually owned.)

(1) This creates major difference between the social strata. Agricultural societies provide the basis for the establishment of economic institutions. Trade becomes more elaborate and money is medium of exchange. It also demands the maintenance of records of transaction, crop harvest, taxation, governmental rules and regulations. Religion becomes separate institution with elaborate rituals and traditions. The agricultural societies support the emergence of arts and cultural artifacts due to surplus food production people tend to divert their attention to other recreational activities. There is far more complex social structure. According to Ian Robertson the number of statuses multiplies, population size increases, cities appear, new institutions emerge, social classes arise, political and economic inequality becomes inbuilt into the social structure and culture becomes much more diversified and heterogeneous.

3.4 THE HANDICRAFTS STAGE

Under this stage, artisans living in villages produced the products for the local population and got in exchange various things from customers. There was hardly any machinery. The craftsman used simple hand tools and manual skills for producing the goods. There was no division of labour at this stage. Thus, the organisation of industry was quite simple. The craftsman was responsible for assembling various raw materials, and selling the goods produced by him.

3.5 THE GUILD SYSTEM

Two types of guilds were initiated, namely, *Merchant Guild*, and *Craft Guild*. A merchant guild was an association of merchants engaged in trade in a particular locality. The purpose of a merchant guild was to enforce equality of opportunity for the members of the guild, to protect their interest, to avoid competition among the members and also to regulate the conduct of its members by prohibiting unfair practices. A craft guild, on the other hand, was an association of the skilled artisans engaged in the same occupation. Thus, there were several guilds in a town. The craft guild regulated entry to the craft, prescribed standards of workmanship and regulated the conduct of the members. The guild system began to decline by the end of 15th century due to the narrow attitude of the guilds and the increasing rivalry among their members.

3.6 THE FEUDAL SYSTEM

In this stage it was believed that the land belonged to the King who got it from God. He gave that to the nobles and could also take that back at any time. It was the duty of the feudal lord to remain loyal to the King.

The cultivators served their feudallords in several ways. Class distinction became well established. The priest worshipped the Kings, and nobles fought wars and serfs rendered manual services to other classes. The traders engaged themselves in trade and commerce. Slavery and serfdom were well established and socially recognized institution.

Gradually, feudal system gave birth to capitalism which gave greater importance to machine than man. Later with the onset of industrial revolution, industrial societies began to emerge.

3.7 THE PUTTING OUT SYSTEM (*domestic system*)

At this stage, the intermediary between the producers and consumers of goods came to play an important role. The entrepreneur gave out work to the artisans who worked in their homes. The artisans still owned the means of production. The entrepreneur came at regular intervals, collected the goods and paid for them to the artisans. The artisans faced difficulty when the scale of production increased and there was a need for new tools of production. The entrepreneur started providing raw-materials and tools to the artisans who produced goods and received wages on piece wage basis. That is why, this stage was called the putting out system. During the beginning of 18th century, the entrepreneur followed the practice of employing the artisans and getting work from them at their own premises. The entrepreneur procured raw-materials and equipment, assigned work to the artisans, inspected the quality of products, and found a market for his products. In other words, he was the owner and manager of the production system.

3.8 THE INDUSTRIAL REVOLUTION

Industrial revolution during the later part of the 18th century and earlier part of the 19th century had a vital influence on the development of industry and commerce. It changed radically the techniques of production and had an important impact on the life of mankind.

Industrial revolution was the result of the inventions of many English scientists during 1760 to 1820. The need for inventions arose because of the increase in the demand of products due to widening of markets followed by the geographical discoveries of the late 15th and 16th centuries. It was beyond the capacity of the industry using labour intensive techniques to meet the increasing demand. The inventors in England had set for themselves the task of finding ways and means to remove the hindrances in production faced by the producers and manufacturers. James Hargreaves made 'spinning jenny' in 1764, and Richard Arkwright introduced 'water-frame' in 1779. Thereafter, many mechanical inventions came in quick succession such as 'mule spinner' by Crompton, and 'power-loom' by Cartwright. The invention of steam engine enabled man to drive the machines by power.

(35)

this laxity. Firstly, the opportunities for the mixing-up of sexes have increased. Now-a-days boys and girls can meet without much difficulty and social opposition. In mills, factories and offices men and women work together. As a result of this frequent encounter of sexes there is laxity in sexual morals. Moreover industrialisation has given rise to materialistic thinking and according to the materialist outlook of life the traditional taboos on sex are harmful. This is why that today premarital sex is not considered to be criminal or immoral. Indeed sex without marriage is coming to be considered quite normal, healthy and moral. In Western society all taboos on sex have broken down.

- (v) **Increase in Rates of Crime :** It is a common observation that the rate of crime is very high in industrial towns. In large metropolitan cities, family life is subject to many pressures. It is very difficult to have normal family life in such towns. On account of disintegration of family, life the control of family over individuals is becoming lax. Due to absence of this control there is encouragement of crime. In every industrial town prostitution and liquor consumption are rampant. Besides theft and dacoity also are commonplace in industrial towns. The incidence of violence and murder is also high in industrial towns.
- (vi) **Loosening of Social Control :** In industrial towns and cities, labourers and artisans from places far and wide come in search of jobs. Having found jobs, they settle in these towns. As most of these workers are outsiders they are not subject to usual social controls. Moreover caste and clan considerations are almost non-existent in big metropolises. On account of all these factors the social control becomes loose and lax. So the control is exercised by law and law enforcing agencies like police, courts etc.

Impact on Entertainment

The means of relaxation and entertainment keep changing with time. There is a big difference between the means of entertainment in pre-industrial and post-industrial societies. In India, there have been significant changes in the means of entertainment as a result of industrialisation. Following are the important influences upon entertainment due to industrialisation.

Traditionally, all entertainment was focussed upon family. Generally, all families used to be joint and therefore were very large. On account of large families it was possible to find all kinds of entertainment within the family itself. The adult male members used to beguile themselves by playing cards or

All the above changes in the industrial licensing policy were designed to eliminate the malpractices earlier encountered in implementation of its various provisions. To some extent this liberalization and rationalisation of policy did succeed in encouraging industrial growth. But the pace of development was painfully slow as industry still remained entangled in the cobweb of licensing provisions, bureaucratic discretion and political corruption. So, what was needed was to completely extricate the industry from the clutches of licensing system and bureaucratic controls and give it a chance to grow in freedom.

6.7 NEW INDUSTRIAL POLICY, 1991

With the gradual liberalisation of the 1956 Industrial Policy in the mid-eighties, the tempo of industrial development started picking up. But the industry was still feeling the burden of many controls and regulations. For a faster growth of industry, it was necessary that even these impediments should be removed. The new Government which took office in June 1991 announced a package of liberalisation measures under its Industrial Policy on July 24, 1991.

The New Industrial Policy (1991) seeks to liberate the industry from the shackles of licensing system, drastically reduce the role of public sector and encourage foreign participation in India's industrial development. The major objectives of the New Industrial Policy are as follows:

- (i) To liberate the industry from the regulatory devices such as licenses and controls,
- (ii) To increase competitiveness of industries for the benefit of the common public,
- (iii) To ensure running of public enterprises on business lines and thus cutting their losses,
- (iv) To enhance support to the small scale sector,
- (v) To provide more incentives for industrialisation of the backward areas, and
- (vi) To ensure rapid industrial development in a competitive environment.

The major provisions of the new industrial policy are discussed below:

1. Abolition of Industrial Licensing

The Industrial Policy of July 1991 announced that industrial licensing will be abolished for all industrial projects except for a short list of industries wherein security and strategic concerns are involved or which have compelling social reasons for strictly regulating their growth. Hazardous chemicals and industries adversely affecting environment were also to be continued under the licensing requirements.

This number was reduced. The amendment to the industrial policy made in 1999 provides for compulsory licensing for only 6 industries. These are as follows:

- (i) Distillation and brewing of alcoholic drinks.
- (ii) Cigars, cigarettes to tobacco and manufactured tobacco substitutes.
- (iii) Electronic, aerospace and defence equipment.
- (vi) Industrial explosives, including detonating fuse, safety fuse, gun powder and matches.
- (v) Hazardous chemicals.
- (vi) Drugs and pharmaceuticals.

2. Dereservation of Industries for Public Sector

- (i) *Reduced Reservation for Public Sector.* Out of the 17 industries reserved for the public sector under the 1956 Industrial Policy, the New Industrial Policy dereserved 9 industries and thus limited the scope of public sector to only 8 industries. Later, a few more industries were dereserved and now the exclusive area of the public sector remains confined to only 4 industrial sectors which are (i) defence production, (ii) atomic energy, (iii) railways, and (iv) minerals used in generation of atomic energy. However, if need be, even some of these areas could also be opened up for the private sector. The public sector can also be allowed to set up units in areas that have now been thrown open for private sector, if the national interest so demands.
- (ii) *Efforts to Revive Loss Making Enterprises.* Those public enterprises which are chronically sick and making persistent losses would be referred to the Board of Industrial and Financial Reconstruction (BIFR) or similar other high level institutions created for this purpose. The BIFR or similar other institutions will formulate schemes for rehabilitation and revival of such industrial units.
- (iii) *Disinvestment in Selected Public Sector Industrial Units.* As a measure to raise larger resources and introduce wider private participation in public sector units, the government would sell a part of its shareholding of these industries to mutual funds, financial institutions, general public and workers. For this purpose, the Government of India set up a 'Disinvestment Commission' in August 1996 to work out the modalities of disinvestment.
- (iv) *Greater Autonomy to Public Enterprises.* The New Industrial Policy seeks to give greater autonomy to the public enterprises in their

The industrialisation has encouraged specialisation. Now-a-days a person is not given a task unless he is specially trained for it. In every sphere of society, a specialized training is needed for the successful performance of a job.

- (v) **Dilution of Control of Castes :** In traditional society each caste had its own code of conduct which was strictly adhered to, any violation thereof attracted strong social reprobation. The violation of caste-based code of conduct used to result in excommunication. In modern industrial society, the control of caste has become loose and lax. The industrial society is highly intricate and complex. Now-a-days persons of all castes work together and it is, therefore, impossible to observe the separate caste-based codes of conduct. In modern industrial societies, the instruments of effective social controls are provided by law and law enforcing agencies.
- (vi) **Loosening Hold of Untouchability :** Under the caste system the persons belonging to different castes did not get together and share a common board. As far as dalit was concerned he could not even sit, stand or walk near the persons of upper castes. As a result of industrialisation, the spectre of untouchability has relaxed its grip upon the thought and imagination of people. Today members of all castes work together in mills and factories and eat food stuff from the same canteens. Many a waiter in restaurants are dalits. Everybody including Brahmins willingly eat food prepared and served by these people. Besides in parks and public places, there are no restrictions on the entry of dalits. Thus, industrialisation can be said to have come as a boon for the lower-castes.

- (vii) **Solemnisation of Inter-caste Marriages :** Under the caste system, the inter-caste marriages were a strict taboo. Hardly anyone dared to defy this taboo and marry with a spouse of any other caste except one's own. The punishment for such marriages was nothing less than complete excommunication. In modern societies, people do marry into other castes without much disapproval. In mills and factories, persons belonging to different castes come together, develop common interests and form friendships. Some of these contacts bloom and flower into mutual love and attraction. The mutual attraction breaks the caste barriers and such persons marry. There is another reason for prevalence of inter-caste marriages. Due to frequent encounters with members of other communities one comes to realize the fundamental oneness of all human beings. One begins to appreciate that stereo-typed thinking with regard to other castes is not valid. Thus, the factors like caste pride and hatred for

other castes which help accentuate caste barriers become inoperative. Thus there emerges a rational outlook.

Impact of Industrialisation on Social Stratification

In the industrial society, there is a unique kind of social stratification. The different strata of society are known as social classes. The basis of stratification in an industrial society is different from that of other societies. Generally, social stratification in an industrial society occurs on the following four-fold bases :

- (i) Occupation
- (ii) Education
- (iii) Income
- (iv) Birth

Occupation : In the industrial society, the main basis of social stratification is occupation. The status and prestige of an individual is determined by the position and rank he occupies in industry, the nature of his profession and his rank and status in that profession. What is meant is that rank and status are of crucial importance in industrial society. Indeed in an industrial society rank and occupation in an industrial society are indicative of one's ability. The rank and status and occupation are not hereditary in industrial society and one has to strive and struggle for these status.

Education : Education has become an important determinant of the status of a person. The better educated are regarded more highly than the less educated. Of course in every society the poets, writers and learned have got top rank and status. However, in industrial society there is some difference in this regard from other societies. The industry has closer relation to science and technology than formal learning. This is why a person who is highly learned is not regarded so well as a person who is proficient in science and technology. In an industrial society it is not literary learning but the scientific learning that commands respect. As a consequence of industrialisation the importance and value of subjects like philosophy and literature has gone down. The formal learning has been replaced by utilitarian subjects.

Income : Another measuring rod of one's social status is one's income; the higher one's income the higher one's social status. The rich are worshipped and poor are hated. According to the materialistic outlook, the possession of material comforts and luxuries is the paramount aim of life and the more are one's material possessions nearer is one to the *summum bonum* of life. For acquisition of material comforts money is needed.

Caste : In the caste-based societies, the son of a Brahmin was accorded the status of Brahmin without the slightest consideration of his actual merit. In feudal societies, the family had great importance in determining one's social status. In industrial society, too, the family has unique importance in

and stocking of these, came in evidence at this time. The exchange of goods and division of labour also came into vogue. As a consequence, different industries started operating separately. For example, blacksmith, carpenter and weaver set up independent units. Thus began the specialisation of jobs.

The medieval industrial age could be divided into the following three distinct industrial systems.

- (1) Feudal system
- (2) Guild system
- (3) Domestic system

Feudal System

Under this system, the primary industry was agriculture. A few persons controlled vast tracts of lands each and they engaged and employed hundreds of workers to do the farming. This system was in vogue in Europe between 9th and 12th centuries. Under this system, the owner of the land was called feudal lord and persons engaged by him were called serfs. The serfs were virtual slaves of the feudal lord. Besides agriculture, other important occupations were : carpentry, blacksmithy, pottery and weaving.

Under the feudal system, the serfs were required to give all kinds of services of their respective lords. In case required, they had to fight war against the enemies of their lord. From 11th century onward, urban towns started coming up in Europe. With urbanization, feudal system got a set-back. The labour serfs. They could migrate to towns for their livelihood. This gave rise to the guild system.

Guild System

Urbanization in Europe emancipated the serfs from their traditional slavery under feudal lords. The workers started learning new trades and skills. As a result of specialisation and proficiency in trades acquired by workers, centres of trade came up. Gradually, this process gave rise to Guild system under which, trade associations representing various trades came into being. These trade associations worked for the promotion and development of their respective trades. These associations supervised the quality and quantity of goods being produced by the members of their association. They also fixed and regulated the prices of goods. Various kinds of relations obtained among the members of a guild.

There were two kinds of guilds: (1) the Merchant Guilds, and (2) the Craft Guilds. The main task of the Merchant Guilds was to look after the interests of traders. They worked for justice from government in a manner in which Chambers of Commerce of today function. The Craft Guilds were associations formed by craftsmen carrying on a particular craft. The craft guilds worked for the promotion of the crafts and protection of the interests of

craftsmen. The craft guilds used to arrange weekly markets where craftsmen could sell their products. In craft guilds, master craftsmen played a crucial role.

The master craftsmen used to belong to families of master craftsmen. The craftsmanship was supposed to be hereditary. During this age, the craft guilds of black-smiths, carpenters and weavers were particularly prominent. In short, the guild system occupies a place of pride in the history of Industrial development. This system played an important role in maintaining social harmony and unity.

The guild system lasted for a pretty long-time, but gradually it declined. From 16th century there was a gradual decline and deterioration in this system. There were two main causes for the decline of this system as discussed below.

- (i) The first cause of the decline of the guild system was that its functions and the rights of its officials were not well-defined. This gave rise to myriad conflicts. For example, the guild of goldsmiths was always warring with the guild of silver-smiths. Moreover, there was gradual fragmentation of the guilds. Originally, there was only one guild of cloth merchant, but later many sub-guilds like association of weavers, tailors, embroiderers etc. were formed.
- (ii) The second cause of the decline of the guild system was external. Under this system, there was one group of traders who were manufacturers and the other was that of middlemen. This group of middlemen later began exploitation of the manufacturers. The middlemen took over the control of all levers of production and arbitrarily used them for their own selfish ends. Generally they took over the control of supply of raw materials. The arbitrary acts of these middlemen gave severe set back to the guild system.

Domestic System

As far as the method of production was concerned, the domestic system was not much different from that of the guild system. However, under the domestic system there was no place for various guilds and trade associations. Under the domestic system a head of family who normally was a master craftsman controlled the entire production and everything was under his personal control. The head of the family used to provide for the raw materials for the manufacture of goods. All processes or stages of production were under his individual control and supervision. Under this system the craftsmen had not much freedom. The system is to be seen today in the form of cottage industries.

The role played by middlemen and the money-lenders which ruined the domestic system. The head of a trade in the domestic system required from time to time extra funds for the purchase of the raw material. This extra amount came from the money-lender and he usually exploited the opportunity to the

determining the social status of a person. However, the reasons for the importance of family in social stratification in industrial society are not the same as in caste-based or feudal society. In an industrial society it is recognised that in order to develop or flower one's talents the family plays an important role. A successful manager and technocrat need especial opportunities of training etc., only those families which can provide such facilities produce successful persons in industrial societies. A man born in a high class family naturally gets more opportunities of development than a person who is less fortunate in this respect. In socialisation also, the family plays an important role.

Impact of Industrialisation on Religion

It has been said that religion prospers most in societies where ignorance is rampant. On the contrary, *as the areas of science and knowledge spread, the hold of religion weakens*. Generally, science and religion are considered to be mutually opposed. In the absence of scientific explanation, small and insignificant things and events become pillars of religious faith and dogma. In pre-scientific days the phenomenon of rain, storm etc., was linked with the religious phenomenon and it was imagined that there are gods of rain, thunder etc. Industrialisation is intimately related to science and technology and with the growth of industrialisation there is spread of science and technology. The widespread use of science and technology creates a scientific outlook. In the Indian society, religion and morals are intimately linked. The moral principles are grounded in religious faith and belief. Morality is based upon religion. This is the reason why with the decline in religion there is change in moral principles as well.

Industrialisation has influenced the religious and moral thinking of the people in the following ways:

- (i) **Decline of Superstitions:** Under the garb of religion orthodoxy and superstitions flourish. Superstitions are due to ignorance. For material and industrial progress, it is very essential that people should be free from the clutches of superstitions. They must have rational and scientific outlook. The process of industrialisation helps the spread and dissemination of science and practical knowledge. As a result of industrialisation people learn the truth of physical reality. They begin to appreciate and value the practical results and are prepared to give up irrational beliefs.
- (ii) **Development of Religious Tolerance:** Generally, orthodox religious people are of narrow and parochial outlook. On account of their parochial outlook they regard their own religion as supreme and infallible. Their attitude towards other religions is that of contempt. As a consequence of industrialization, the persons of different faiths come together and get an opportunity of knowing and understanding

the truth about each other. This results in dispelling of wrong notions about other faiths and an appreciation of basic unity of all faiths.

- (iii) **Secular States:** Previously the states used to be theocratic; each state subscribed to some or other faith. The citizens professing faiths different from that of the state did not enjoy full rights and privileges; they were treated as second-rate citizens. But as a result of industrialization, the concept of theocratic states has become obsolete. Due to industrialisation every state now has a sizeable number of minorities whose claims cannot be ignored. The states today subscribe to the ideology of religion but accords equal status to all religions. This is secularism.

Impact of Industrialisation on Morals

The impact of industrialisation on morals is discussed below :

- (i) **Rational Outlook :** The Indian society considered the moral principles as universal truths beyond the sphere of doubt and reason. As a result of industrialisation, the outlook of common man has changed. Now people demand rational justification as to why a particular action is considered right or wrong. In industrial societies it is believed that the moral principles are man-made and that morality is for the sake of human life and society and not vice versa. The tendency to examine and evaluate every moral principle before acquiescing to it is gaining ground in modern society.
- (ii) **Materialist Outlook :** On account of industrialisation the importance and value of physical progress and development has enhanced. An average citizen of to-day does not appear to be satisfied and contented. The maximum material acquisition seems to have become the aim of modern life. It is for this reason that a common man of today is averse to religion and spirituality. There is a strong competition for acquiring as much wealth as possible.
- (iii) **Individualism :** Due to industrialisation, large metropolitan centres are coming up. In large communities there is decline in fellow feeling. In such societies therefore the community feeling or the feeling of mutual belongingness is rather missing. The life becomes rapid and mechanical and people have little opportunity to look after the welfare of others. The life in industrial societies becomes self-centred. As a result of this there is growth and development of individualism everywhere.
- (iv) **Permissiveness in Sex Morals :** As a result of industrialisation, the sexual mores have become lax. There are numerous reasons for

other institutions. Traditionally, an Indian family used to be a centre of birth, rearing and education of children. The children used to get training in the ancestral profession. The function of socialisation of children, too, used to be performed by the family. But in the industrialised society of today the family is not required to fulfil these roles. Today children are born in hospitals. In big towns, we find today a number of Infant-Care Centres and Playway Schools. The education of children today is done in schools and not in homes. The professional training also is no longer the obligation of the family. What is even more; even feeding is no longer the exclusive obligation of the family many people in metropolises eat out of homes. In almost all big cities people rarely take lunch at home except on Sundays and holidays.

(ii) **Breaking-Up of Joint Family :** Traditionally, most of the Indian families were joint families. As a result of industrialisation, most of these joint families are breaking up and are being replaced by nuclear families. In industrial towns there is acute shortage of residential accommodation. Most of the people have to content themselves with a single or two room accommodation. In these circumstances it is physically exceedingly difficult if not impossible to retain the joint family system.

(iii) **Nucleus Families :** As a result of industrialisation, the cost of living has gone up. At the same time standard of living has also gone up considerably. Everybody wants good clothes, house and other comforts of life. Obviously, it is not possible to maintain the standard with a big family. Therefore, people these days want to keep small families.

(iv) **Status of Women :** In past the status enjoyed by women in Indian

society was rather low. Women were shut up in the four walls of the home. They enjoyed no independence. Without husband the condition of a woman was miserable. As a result of industrialisation there has been much improvement in the status of women. Alongwith men, women today work in all walks of life. They are therefore becoming independent economically. Their status and respect in society has therefore improved considerably. Now-a-days women consider themselves equal, even superior, to men. As a result of this feeling.

(v) **Disintegration of Family :** As a result of industrialisation, the outlook of intense individualism has grown. Everyone wants to have his own way; no one likes to be subject to any body. Nobody these days appreciates the need for adjustment and give and take. Thus we find in modern society families cracking up under stress and strain. There is continuous tension and conflict in the minds of family

members. As a consequence of this situation it is small wonder that families are breaking up fast in urban society.

(vi) **Change in Family Goals :** The goals and ideals which nourished the traditional Indian family were spiritual and religious. The housewife used to regard her husband as a divine being. They willingly subjected themselves to each and every whim of their husbands. Even children used to give unqualified respect to their parents. The father was regarded to be the head of the family and his command was rarely defied. In the industrial society, there is no room for such ideals. For a modern wife the husband can be at best an honourable colleague and, under no circumstances, a god. The powerful status of father in a family is being lowered as a result of industrialisation.

Impact of Industrialisation on Caste System

In the Indian society, the caste system has had a unique role. The social status of a person was determined by his caste. But industrialisation has diminished the role of caste system. The impact of industrialisation upon Indian caste system are as under :

v) Disintegration of Caste System : The industrialisation in India has led to breakdown of caste-system. Traditionally, the social status of a person in Indian society was determined by the caste into which he was born. As a result of industrialisation the caste-based criterion of social classification has changed. In the industrial society it is the class and not the caste which fixes the social status of a person. Now the society is split into classes. Man gets social status according to his class.

(ii) **Reduction in Brahmin's Influence :** In the traditional social structure the Brahmins enjoyed the highest status in the society. But as a result of industrialisation the influence of Brahmins is gradually losing its traditional hold on Indian society.

vi) Abolition of System of Caste-based Functions : In the traditional caste-based society each caste had some functions. The Brahmin had the role of teacher, the Kshatriya that of warrior. Now all this has changed. It is no longer obligatory upon a shudra to do menial jobs for upper caste. Due to these changes, the traditional functions of the castes stand abolished.

(iv) **Division of Labour based on Specialisation :** Under the caste system, the division of labour was based upon caste and upon the consideration of efficiency. A Brahmin was to perform the function of learned even if he was poor in learning. Under the influence of industrialisation, the criterion of division of labour has changed.

3.11 THE FACTORY SYSTEM

The industrial revolution took place in England and later on spread to other countries of the world. Since the industrial revolution, many changes have taken place in the industrial system. The present age is an era of large scale production. Many big factories have come into existence and they employ a large number of workers. They cater to the needs of the people not only in one country but also in many countries of the world. Thus, machine age has facilitated world trade and growth of multinational corporations.

During the last size decades, tremendous and rapid development of science and technology has taken place. That is why, the present era is known as 'atomic age', 'space age' and 'electronic age'. Some people also call this era as the second phase of industrial revolution. In the present machine age, different countries of the world are closely inter-related by very fast means of transport and communication.

The Characteristics of The Factory System

The main features of the modern factory system are as follows:

- (i) Large Scale Production. Modern factories carry on large scale production to meet the demands of large number of people. Production is carried on in anticipation of demand.
- (ii) Mechanisation. The developments in the fields of science and technology have increased the degree of mechanisation in the modern factory system. The efficiency of the factories has increased many times because of new innovations.
- (iii) Automation. In many advanced countries like the USA and the UK, automation has been introduced in the production system. By automation we mean installation of one set of machines to run another set of machines. For instance, there is automation in oil refineries, chemical industrial units and food processing units. A small number of operators sitting in the control room control the entire operations in the factory.
- (iv) Management Information System. Introduction of management information system with the help of electronic computers is another highlight of modern machine age. The computers have vast memories. They can store huge amount of information and make available the required information within seconds. They help in taking managerial decisions at the proper time.
- (v) Specialisation. There is greater specialisation and division of labour in the modern factories. Many industrial units specialise in the manufacture of a small number of components or parts of different products. Division of labour has facilitated the workers to concentrate on limited operations.

(vi) Standardisation. Standardisation brings about uniformity of quality and size, and facilitates large scale production. Now a days, many organisations, whether production or services based, are trying to get themselves standardised as per International Standards called ISO certifications. Thus, overall quality consciousness has increased in the industry.

(vii) Growth of Industrial Areas. Concentration of industries in certain regions of the country has given rise to the growth of industrial areas which offer special advantages to the industrial units in regard to raw materials, power, access to market, financing, transporting, etc.

(viii) Expansion of International Trade. Mass production, standardisation of products, and improved means of transport and communication have increased the volume of international trade among different countries.

(ix) Research and Development. Big industrial enterprises have established separate departments for research and development and they spend a considerable portion of their earnings for innovating new products and ideas. Research and development activities have the effect of decreasing cost, increasing quality and consumer satisfaction and raising the standard of living of the people.

(x) Competition. There is cut-throat competition among the producers of goods in all capitalist economies. Economic relations between different persons are based on contract rather than on customs and traditions.

Thus, it can be concluded that industrial revolution gave plants and machinery which gave birth to the factory system. Entrepreneurs established factories and employed a large number of workers to work in their factories. This gave rise to two classes, namely, capitalist and workers and the term 'industrial relations' was coined to create and maintain cordial relations between these two classes for the growth of industry.

3.12 CRITICAL EVALUATION OF INDUSTRIAL REVOLUTION

The Industrial Revolution was based upon a new, dynamic form of economic activity—capitalism. The system of capitalism became the driving force behind the growth of industrial activity. Capitalism involved new attitudes and institutions. Entrepreneurs now engaged in the sustained, systematic pursuit of profit. The markets acted as the key instrument of productive life. And goods, services and labour became commodities whose use was determined by rational calculation.

has been sought to be balanced by expansion of heavy and capital goods industries.

5.6 INDUSTRIAL POLICY, 1991 AND RECENT DEVELOPMENTS

With the gradual liberalisation of the 1956 Industrial Policy in the mid-eighties, the tempo of industrial development started picking up. But the industry was still feeling the burden of many controls and regulations. For a faster growth of industry, it was necessary that even these impediments should be removed. In July 1991, the Government announced a package of liberalisation measures under its Industrial Policy. The Industrial Policy, 1991 seeks to liberate the industry from the shackles of licensing system, drastically reduce the role of public sector and encourage foreign participation in India's industrial development.

(This policy has abolished the requirement of licensing for most of the industries. Many of the industries reserved for the public sector under the earlier policy, have been de-reserved. The role of public sector has been limited only to 4 industries of strategic importance. Disinvestment is being carried out in many public sector industrial enterprises. Policy towards foreign capital has been liberalised. The share of foreign equity participation has been increased and in many activities 100 per cent FDI is permitted. Automatic permission is now granted for technology agreements with foreign companies. Appropriate measures have been taken to remove obstacles in the way of growth and expansion of industrial units of the large industrial houses. Small-scale sector has been assured all help and accorded due recognition. Foreign Investment Promotion Board (FIPB) has been set up to promote and channelise foreign investment in India. National Renewal Fund has been set up to provide help and rehabilitate the retrenched workers. The new industrial policy is market-friendly and aims at encouraging private enterprise and initiative.

Liberalisation and Privatisation: As a result of liberalisation, many Indian companies have been bought over by multinationals. Some instance of the first is when, Parle drinks was bought by Coca Cola. Parle's annual turnover was Rs. 250 crores, while Coca Cola's advertising budget alone was Rs. 400 crores.

The government is trying to sell its share in several public sector companies, a process which is known as disinvestment. Many government workers are scared that after disinvestment, they will lose their jobs. In Modern Foods, which was set up by the government to make healthy bread available at cheap prices, and which was the first company to be privatised, 60% of the workers were forced to retire in the first five years.

More and more companies are now reducing the number of permanent employees and outsourcing their work to smaller companies or even to home

For multinational companies, thus outsourcing is done across the globe, with developing countries like India providing cheap labour. Because small companies have to compete for orders from the big companies, they keep wages low, and working conditions are often poor. It is more difficult for trade unions to organise in smaller firms. Almost all companies, even government ones, now practice some form of outsourcing and contracting. But the trend is especially visible in the private sector.

The service sector is growing fastly. The IT industry, hotels and other services are employing more people and the urban middle class is growing along with urban middle class values like those we see in television serials and films. But we also see that very few people in India have access to secure jobs, with even the small number in regular salaried employment becoming more insecure due to the rise in contract labour. So far, employment by the government was a major avenue for increasing the well-being of the population, but now even that is coming down. Liberalisation and privatisation appear to be associated with rising income inequality.

Over the years, tremendous and rapid development of science and technology has taken place. That is why, the present era is known as 'atomic age', 'space age' and 'electronic age'. Some people also call this era as the phase of second industrial revolution. In the present machine age, different countries of the world are closely inter-related by very fast means of transport and communication.

4.1 BEGINNING OF INDUSTRIALISATION

As a result of industrial revolution, capital became a critical factor of production. With the technological advancements, the use of out-workers (people working at their homes with their own tools and machines) declined and employment in factories rose up tremendously. The owner of the factory provided raw materials, tools and machines and other means of production in the factory premises and the workers offered their labour in return of wages. This led to the emergence of two distinct classes on the industrial scene, namely, the capitalist class and the working class. The capitalist class became more powerful as it provided the most important input of production i.e., capital in the initial stages of industrialisation the workers were largely untrained, uneducated and unorganised and hence didn't receive a fair deal at the hands of employers.

In the early stages of industrialisation, the trends which dominated the scene were :

- (i) Loss of Freedom. Unlike working in their homes, where the workers had freedom in carrying out work the way they liked it, in factories they were forced to work under strict discipline. They had little say in matters of working conditions, rest interval, holidays, wages etc. They also lost their freedom of movement during working hours.)
- (ii) Unhygienic Working Conditions. The work environment in the factories was extremely unhygienic and unhealthy. Also it was largely insanitary, badly lit and ill-ventilated; little attention was paid to the health and safety of workers.
- (iii) Employment of Children. Partly due to economic-necessity and partly due to pressure of employers, the workers were forced to put their children to employment. There was no difference in the hours of work and other working conditions of both the child and the adult workers. The incidents of the shameless exploitation of child workers by the employers were not uncommon.

Since the workers were unorganised and had no bargaining power, the Governments in many countries intervened through various laws to check the exploitation of workers and to safeguard their health and welfare. Predominance of mass illiteracy among the workers also stood in way of rise of trade unionism. But gradually, with the initiative of social and political workers, trade unions were formed to protect the economic, social and psychological interest of the

workers. The factors which necessitated the growth of trade unions are as follows :

- (i) commanding position of the capitalist or employer;
- (ii) employment of large number of workers in factories;
- (iii) introduction of division of labour;
- (iv) growth of new class of technical and professional employees;
- (v) migration of labour from rural areas to urban areas;
- (vi) rise of materialism;
- (vii) monotony and boredom in jobs, increase in accidents, etc.;
- (viii) employment of children in factories;
- (ix) payment of lower wages;
- (x) unhygienic working conditions in factories;
- (xi) lack of welfare measures for workers, etc.

4.2 CAUSES OF INDUSTRIALISATION

The main factors which gave stimulus to industrialisation are as follows :

- (i) Large Scale Production. Modern factories carry on large scale production to meet the demands of large number of people. Production is carried on in anticipation of demand.
- (ii) Mechanisation. The developments in the fields of science and technology have increased the degree of mechanisation in the modern factory system. The efficiency of the factories has increased many times because of new innovations.
- (iii) Automation. In many advanced countries like the U.S.A. and the U.K., automation has been introduced in the production system. By automation we mean installation of one set of machines to run another set of machines. For instance, there is automation in oil refineries, chemical industrial units and food processing units. A small number of operators sitting in the control room control the entire operation.
- (iv) Specialisation. There is greater specialisation and division of labour. Many industrial units specialise in the manufacture of a small number of components or parts of different products. Division of labour has facilitated the workers to concentrate on limited operations.
- (v) Standardisation. Standardisation brings about uniformity of quality and size, and facilitates large scale production. Now a days, many organisations, whether production or services based, are trying to get themselves standardised as per International Standards called ISO certifications. Thus, overall quality consciousness has increased in industry.

Features of Industrial Revolution

The characteristic features of industrial revolution may be summed up as follows :

- ✓ 1. There were a series of mechanical inventions by the English scientists.
- ✓ 2. Production in factories started with the help of machines run by mechanical power such as steam, oil and electricity. Thus, setting up a factory required huge amount of capital. This gave birth to two classes in industry, namely, capitalist and labour.
- ✓ 3. Introduction of machinery led to mass scale production of standardised goods.
- ✓ 4. The factory system provided both direct and indirect employment to a large number of people. Direct employment was generated by the factories and trading in raw materials and factors products gave indirect employment to traders and mercantile agents.
- ✓ 5. Large scale employment in factories gave birth to labour problems which necessitated some steps by employers to create good human relations in factories.

Changes brought about by Industrial Revolution. The significant changes brought about by industrial revolution are listed below :

- (a) *Development of engineering.* Engineers were required to design machinery for textiles, coal mining, etc. for making and repairing steam engines, and making tools and locomotives.
- (b) *Revolution in iron making.* The engineers, who took charge of important task connected with the industrial change, could succeed in their work only if iron was cast in large quantities and was of fairly good quality.
- (c) *Use of power driven machines.* Power driven machines were used in industry. It began with cotton spinning and weaving and, later on, spread to wool, silk, etc.
- (d) *Rise of chemical industry.* The application of power driven machines in textile mills made it necessary to develop bleaching, dyeing, finishing and printing processes to keep pace with the output of textile mills.
- (e) *Development of coal mining.* Coal was needed to refine pig iron and cast it into the form in which it was needed by the engineers. It was also needed for generation of steam power.
- (f) *Development of means of transport.* For regular supply of raw materials, etc., to industry and for the distribution of goods produced by the factories, effective transport was a must. The development

of the means of transport like railways and steamships constitutes the most important impact of the industrial revolution.

Economic Effects of Industrial Revolution

Industrial revolution brought about the following economic changes :

- (i) *Large Scale Production.* The industrial revolution made mass production of goods possible by the use of power driven machinery in place of hand tools.
- (ii) *Change of Form of Ownership.* Large scale production increased the size of industrial enterprises. Sole proprietorship concerns expanded into partnership firms and further developed into joint-stock companies. The evolution of joint stock companies was an important outcome of the industrial revolution.
- (iii) *Specialisation.* Industrialisation led to a craze for specialisation in every field because of development in the means of transport and communication. Different parts of the country (and even different parts of the world) specialised in producing or manufacturing different commodities or parts. Specialisation helped in reducing the cost of production.
- (iv) *Rise of Capitalism.* Cottage system of production was greatly replaced by the factory system. Under the factory system, capital is the crucial factor. Large scale production further increased the need and significance of capital. This gave birth to capitalistic economy under which there are two classes of people, namely, capitalists and workers. The workers are purely wage earners dependent for their living on the capitalist employers. The capitalist system also increased the importance of money as a medium of exchange, measure of value and store of value.
- (v) *Trade Cycles.* Large scale production accompanied by capitalism gave birth to trade cycles having successive periods of inflation and depression. During the period of prosperity, there is high level of employment and sustained rise in prices. But during depression, there is large scale unemployment, decrease in demand and so on. Many weak firms are eliminated during the depression period.

- (vi) *Standard of Living.* Industrial revolution had a positive impact on the standard of living of the people. Factories produced goods of better quality and at cheaper rates for the consumption of the people. This improved their standard of living.

Social and Political Effects of Industrial Revolution

Industrial revolution had certain social and political implications which created the need for organisation of workers and later paved the way for trade unionism. Social and political effects of industrial revolution are as under :