# INDIAN SCHOOL AL WADI AL KABIR

| Class: X | Department: SOCIAL SCIENCE | Subject: Geography |
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| Chapter 6<br>Question Bank No: 4 | Topic: MANUFACTURING INDUSTRIES | Year:2022-23 |

**Q. 1. What is manufacturing?**

**Ans.** Production of goods in large quantities after processing from raw materials to more valuable products is called manufacturing. For example, paper is manufactured from wood, sugar from sugarcane, iron and steel from iron ore and aluminium from bauxite.

**Q. 2. Explain the growth of industry and its contribution to the national economy.**

**Ans.**

i) Over the last two decades, the share of manufacturing sector has stagnated at 17% of GDP-out of a total of 27% for the industry, which includes 10% for mining, quarrying, electricity and gas.

ii) The trend of growth rate in manufacturing over the last decade has been around 7% per annum.

iii) Since 2003, manufacturing is once again growing at the rate 9-10% per annum.

iv) With appropriate policy interventions by the govt. and renewed efforts by the industry to improve productivity, economists predict that manufacturing can achieve its target over the next decade.

**Q. 3. Explain three physical factors for the localization of an industry in a particular area.**

**Ans**

i**). Raw materials:** The location of industrial enterprises is sometimes determined simply by location of the raw materials. The jute mills in West Bengal are concentrated close to the sources of raw materials.

**ii). Power:** Regular supply of power is a perquisite for the localization of industries. Most of the industries tend to concentrate at the source of power.

**iii). Climate:** Climate plays an important role in the establishment of industries at a place. Cotton textile industry requires a humid climate consequently majority of cotton textile mills are concentrated in Maharashtra and Gujarat.

**Q.4. Explain any three human factors for the localization of an industry in a particular area.**

**Ans.**

**i). Capital:** Big cities like Mumbai, Kolkata, Delhi, Chennai, etc are big industrial centres, because the big capitalists live in these cities.

**ii). Government Policies:** The government activity in planning the future distribution of industries, for reducing regional disparities, elimination of pollution of air and water, and for avoiding their heavy clustering in big cities, has also become an important localization factor.

**iii). Market:** The entire process of manufacturing is useless until the finished goods reach the market. Nearness to the market is essential for the quick disposal of manufactured goods. It helps in reducing the transport.

**Q. 5. Distinguish between the Light industry and the Heavy Industry.**

**Ans**.

**i). Heavy Industries:** Industries using heavy and bulky raw materials and whose products are also heavy and heavy and bulky and that involve high cost of transport come under this category. eg., iron and steel industry, sugar industry and cement industry.

**ii). Light industries:** Industries whose raw material as well as finished products are light and which can also employ female labour come under this category. For example: watch making, pen making, sewing machine making, radio and television.

**Q. 6. Distinguish between the large scale and the small scale industries.**

**Ans**

**Large scale industries**

i) Those industries where investment of capital is more than Rupees one crore are called as large-scale industries.

ii) The quantity of finished goods, raw materials and capital investment is very large.

iii) Skilled labour and large- scale machinery is used in these industries.

iv) For example: Iron and steel, cotton textile, cement, Petrochemicals etc.

**Small scale industries**

i) Those industries where investment of capital is less than Rupees one crore are called as small-scale industries.

ii) These industries manufacture small goods. No huge quantity of raw material and capital is required.

iii) Labour and small machinery is used in these industries.

iv) For example: Toy industry, soap making, radio industry etc.

**Q.7. Write about the role of Information Technology and electronics industry in modern India.**

**Ans.**

(i) Bangalore is often termed as the electronic capital of India.

(ii) Mumbai, Pune, Delhi, Hyderabad, Chennai, Kolkata, Lucknow and Coimbatore are the other important centres.

(iii) This industry had generated a large number of employments.

(iv) The IT industry has been a major foreign exchange earner in the last few years because of its fast growing Business Processes Outsourcing (BPO) sector.

(v) The continuing growth in hardware and software is the key to the success of IT industry in India.

**Q.8. How do industries pollute air ? Explain with examples.**

**Ans.** Pollution is a negative effect of industrialisation. It adversely affects the environment and degrades it.

Air pollution is caused by the presence of high proportion of undesirable gases, such as sulphur dioxide and carbon monoxide, dust sprays, mist and smoke in the atmosphere due to emission from industrial units.

Smoke is emitted by chemical and paper factories, brick kilns, refineries and smelting plants and burning of fossil fuels in big and small factories that ignore pollution norms. These cause respiratory diseases among the people working or living in such areas.

Toxic gas leaks as during the Bhopal Gas Tragedy can be hazardous with long-term ill effects.

**Q.9. How does the industry create water pollution? Explain by giving four points.**

**Ans**.i) Water pollution is caused by organic and inorganic industrial waste discharged into rivers.

ii) .Industries discharge dyes, detergents, acids, salts and heavy metals like lead and mercury, pesticides, fertilizers, etc. into the water bodies.

iii). Industries also let out solid wastes like fly ask, iron and steel slag, gypsum etc. into water.

iv). Overdrawing of groundwater resources by industries also lead to water pollution.

**Q.10.How does the thermal pollution of water occur?**

**Ans.** Thermal pollution of water occurs when hot water from factories and thermal plants is drained into rivers and ponds before cooling.

**Q.11.What are the effects of waste from nuclear power plants, nuclear and weapon production facilities?**

**Ans.** They cause: a) Cancer b) Birth defects c) Miscarriages

**Q.12.What renders the soil useless? How does the groundwater gets contaminated?**

**Ans.** a) The following renders the soil useless:

1. Dumping of wastes specially glass 2. Harmful chemicals
3.Industrial effluents 4. Packaging 5. Salts 6. Garbage

b) Rain water percolates to the soil carrying the pollutants to the ground and the groundwater also gets contaminated.

**Q.13. Briefly describe any five measures of controlling industrial pollution.**

**OR**

**Discuss the steps to be taken to minimise environmental degradation by industries.**

Ans. (i) Minimising use of water for processing by reusing and recycling it in two or more successive stages.

(ii) Harvesting of rainwater to meet water requirements.

(iii) Treatment of hot water and affluent before releasing them in rivers and ponds.

iv) Air pollution can be reduced by reduction of particulate matter, aerosol emission in the air by fitting smoke stacks to factories with electrostatic precipitators, fabric filters, scrubbers and inertial separators.

v). Smoke can be reduced by using oil and gas instead of coal in factories.

vi). Machinery and equipments and generators can be fitted with silencers.

vii). Machinery can be redesigned to make them energy efficient and to reduce noise.

viii). Noise absorbing material may be used apart from personal use of earplugs and earphones.

ix). Shifting of industries away from cities.

**Q.14. Suggest some measures to reduce noise pollution.**

Ans. Suggestions

i). Machinery and equipment can be reduced and generators should be fitted with silencers.

ii). All machinery can be redesigned to increase energy efficiency and reduce noise.

iii). Noise absorbing material may be used

iv) Personal use of ear plugs and ear phones.

**Q15.What are Agglomeration Economies?**

**Ans:**

Many Industries tend to come together to make use of the advantages offered by the urban centres known as agglomeration economies. **(1 MARK)**

**Q.16. What are the prime factors in location of aluminium smelting industries? Where are the main aluminium smelting plants of the country located? OR Present a brief profile of aluminium smelting industry in India.**

**Ans.** The prime factors in location of aluminium smelting industries are as follows:

i) Availability of the raw material, bauxite at minimum cost as it is a bulky material, 4 to 6 tonnes of bauxite is required to manufacture 1 tonne of aluminium.

ii) Regular supply of power is another important factor for location of the industry.

Orissa, West Bengal, Kerala, Uttar Pradesh, Chhattisgarh, Maharashtra, and Tamil Nadu, are the states where aluminium smelting plants are located.

**Q.17.Why is fertilizer industry almost widespread throughout the country? Give three reasons.**

**Ans.** (i) Spread of fertilizer industry rests on raw materials ie, coal, petroleum and natural gas and hence it is located near to it.

(ii) After Green Revolution it is expanded to many parts of the country where agricultural prosperity is achieved.

(iii) Fertilizer can be transported through pipelines to far off places which causes decentralization.

**Q.18.Explain any three characteristics of the chemical industry of India.**

**Ans:** The characteristics of chemical industries of India are as follows:

i) Chemical industries in India are fast growing and diversifying.

ii) It contains both large scale and small scale manufacturing units.

iii) There has been a rapid growth in the manufacture of organic and inorganic chemicals.

iv) Inorganic chemical industry is more widespread. Inorganic chemicals include sulphuric acid nitric acid, alkalies, soda ash (used to make glass, soaps and detergents, paper) and caustic soda.

v) Organic chemical industry is located near oil refineries or petro-chemical plants.

vi) The chemical industry is its own largest consumer. Basic chemicals undergo processing to further produce other chemicals that are used for industrial application, agriculture or directly for consumer markets.

**Q.19.Contributions of NTPC in accordance with Sustainable Development.**

**Ans:**

i) Optimum utilization of equipment adopting latest techniques and upgrading existing equipment.
ii) Minimising waste generation by maximizing ash utilization.
iii) Providing green belts for nurturing ecological balance and addressing the question of special purpose vehicles for afforestation.
iv) Reducing environmental pollution through ash pond management, ash water recycling system and liquid waste management.
v) Ecological monitoring, reviews and online database management for all its power stations.

**PREVIOUS YEARS' QUESTIONS**

**Q.1. What is the contribution of industry to national economy of India? Compare it with the East-Asian countries. What is the desired growth and present position of industry in GDP ?**

**Ans.** In India, the share of manufacturing sector has stagnated at 17 per cent of GDP – out of total of 27 per cent for the industry. This is much lower in comparison to some East Asian economics, where it is 25 to 35 per cent.

The desired growth rate over the next decade is 12 per cent per annum.

**Q.2. Mention any two factors that have contributed to a healthy growth of the automobile industry in India ?**

**OR "The automobile industry had experienced a quantum jump in less than 15 years." Name two centres where this industry is located.**

**Ans.** (i) The introduction of new and contemporary models stimulated the demand for vehicles in the market.

(ii) Foreign Direct Investment (FDI) brought in new technology and aligned the industry with global developments. **The two centres of automobile industry are Jamshedpur and Gurgaon.**

**Q.3. What are software technology parks? State any two points of significance of Information Technology industry in India? (refer ans. no. 7)**

**Ans.** Software technology parks provide single window services and high data communication facility to software experts.

**Q.4. Suggest any three measures to reduce the industrial pollution of freshwater resources.**

**Ans.** (i) Minimising use of water for processing by reusing and recycling it in two or more successive stages.

(ii) Harvesting of rainwater to meet water requirements.

(iii) Treatment of hot water and affluent before releasing them in rivers and ponds.

**Q.5. How does the industrial pollution degrade the environment? Explain with three examples.**

**Ans.** The three types of pollution caused by industries are air pollution, water pollution and Noise pollution. (i) Air pollution through spewing of smoke from industry pollute the air with sulphur dioxide and carbon monoxide. (ii) Industrial wastes and effluents discharged through industries into rivers and ponds cause water pollution (iii) Besides industrial and construction activities generates noise pollution.