

SOCIAL SCIENCE
WORKSHEET_240125
Geography - Chapter 06 Manufacturing Industries
(ANSWERS)

SUBJECT: SOCIAL SCIENCE

MAX. MARKS : 40

CLASS : X

DURATION : 1½ hrs

General Instructions:

- (i). All questions are compulsory.
- (ii). This question paper contains **18 questions** divided into five Sections A, B, C, D and E.
- (iii). **Section A** comprises of **8 MCQs** of **1 mark** each. **Section B** comprises of 3 questions of **2 marks** each. **Section C** comprises of 4 questions of **3 marks** each. **Section D** comprises of 2 questions of **5 marks** each and **Section E** comprises of 1 Case Study Based Questions of **4 marks** each.
- (iv). There is no overall choice.
- (v). Use of Calculators is not permitted

SECTION – A

Questions 1 to 8 carry 1 mark each.

1. Observe the given picture and choose an appropriate measure to prevent the kind of pollution featured in it.



- (a) Application of earplugs and silencers in chimneys
 - (b) Waste must not be thrown in open grounds.
 - (c) Water from the industries must be stored in containers, treated and cooled before being recycled to be used in factories again.
 - (d) Waste must be segregated into organic and inorganic waste and compost bins must be used.
- Ans. (c) Water from the industries must be stored in containers, treated and cooled before being recycled to be used in factories again.

The given picture shows the release of hot water from factories and thermal plants directly into water bodies. This is called thermal pollution. This can be prevented by treating the waste water, storing it and recycling it to use it in the factory again instead of releasing it into water bodies directly.

2. Which of the following statements is/are correct about NTPC?

- (I) NTPC is a major power providing corporation in India.
- (II) It is responsible for major air pollution in India.
- (III) NTPC has made ecological monitoring, reviews and online database management compulsory for all its power stations to prevent pollution.
- (IV) NTPC has a plant in Ramagundam.

Codes:

- (a) (I), (III) and (IV) (b) (I) and (II) (c) (I) and (IV) (d) (I), (II), (III) and (IV)

Ans. (a) (I), (III) and (IV)

NTPC is a major power providing corporation in India. The corporation has a proactive approach for preserving the natural environment and resources like water, oil and gas and fuels in places where it is setting up power plants.

3. Which one of the following is a private sector industry?

- (a) BHEL (b) TISCO (c) OIL (d) SAIL

Ans. (b) TISCO

Private sector industries are owned and operated by individuals or a group of individuals for example TISCO, Bajaj Auto Ltd., Dabur Industries, etc.

4. Choose the group of pollutants which cause air pollution.

- (a) Organic and inorganic industrial effluents poured into water bodies.
(b) Presence of high proportion of sulphur dioxide, carbon monoxide and air-borne particulate materials.
(c) Waste thrown on grounds.
(d) Unwanted sound waves from industries, generators, saws and pneumatic and electric drills.

Ans. (b) Presence of high proportion of sulphur dioxide, carbon monoxide and air-borne particulate materials.

5. Which of the following is a negative effect of industrialisation?

- (a) Economic growth and globalisation
(b) Pollution and environmental degradation
(c) Foreign exchange earnings
(d) Rapid urbanisation

Ans. (b) Pollution and environmental degradation

6. What is the full form of NMCC?

- (a) National Manufacturing Competitiveness Council
(b) National Manufacturing Clearance Council
(c) National Manufacturing Corporate Council
(d) National Manufacturing Caring Council

Ans. (a) National Manufacturing Competitiveness Council

In the following questions 7 and 8, a statement of assertion (A) is followed by a statement of Reason (R). Choose the correct answer out of the following choices.

- (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
(b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
(c) Assertion (A) is true but Reason (R) is false
(d) Assertion (A) is false but Reason (R) is true

7. **Assertion (A):** Production of goods in large quantities after processing from raw materials to more valuable products is called manufacturing.

Reason (R): The economic strength of a country is measured by the development of manufacturing industries.

Ans. (b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)

Manufacturing industries help in modernizing agriculture. This sector also transforms raw materials into finished products creating more choices for the consumers and making it more prosperous.

8. **Assertion (A):** Manufacturing activities also reduce the heavy dependence of people on agricultural income.

Reason (R): It replaces the secondary and tertiary sector activities.

Ans. (c) (A) is true but (R) is false.

Manufacturing activities also reduce the heavy dependence of people on agricultural income by providing them jobs in secondary and tertiary sectors.

SECTION – B

Questions 9 to 11 carry 2 marks each.

- 9.** Why does the textile industry occupy unique position in the Indian economy. Explain.

Ans. It is the only industry in the country, which is self-reliant and complete in the value chain i.e., from raw material to the highest value-added products. Textile industries create demand for other industries such as chemicals, dyes, packaging materials and engineering works. Thus, it can be concluded that the textile industry occupies a unique position in Indian economy.

- 10.** How is Public sector different from Private Sector?

Ans. In public sector, government owns most of the assets and provides all the services, e.g. railways or post office. While in the private sector, ownership of assets and delivery of services is in the hands of private individuals or companies, e.g., Tata Iron and Steel Company Limited (TISCO) or Reliance Industries Limited (RIL).

OR

Classify industries on the basis of their main role. How are they different from each other?

Ans. Classification according to their main role:

- (i) Basic or key industries which supply their products or raw materials to manufacture other goods, e.g., iron and steel, copper smelting, aluminium smelting, etc.
- (ii) Consumer industries that produce goods for direct use by consumers—sugar, toothpaste, paper, sewing machines, fans, etc.

- 11.** Why is the iron and steel industry called as the ‘basic industry’? Explain.

Ans. Iron and steel Industry called as the ‘basic industry’ because it is needed to manufacture a variety of engineering goods, construction materials, defence, medical, telephonic, scientific equipments and a variety of consumer goods.

SECTION – C

Questions 12 to 15 carry 3 marks each.

- 12.** Explain any three ways through which industrial pollution can be reduced.

Ans. Three ways through which industrial pollution can be reduced are :

- (i) Machinery and equipment can be used and generators should be fitted with silencers.
- (ii) Waste and effluents should be recycled or treated through biological process and mechanical means.
- (iii) By fitting suitable smoke screens in factories with electrostatic precipitators, scrubbers etc.

OR

Environmental degradation do not respect national or state boundaries.” Justify the statement.

Ans. Consequences of environmental degradation do not respect national or state boundaries:

- (i) The increase in pollution of land, water, air and noise resulting in degradation of the environment cannot be overlooked.
- (ii) Pollution of river waters affects all as most of the rivers passes through different states.
- (iii) Air pollution caused by the presence of a high proportion of undesirable gases adversely affects human health and the atmosphere as a whole.
- (iv) Thermal pollution of river water affects aquatic life irrespective of state and national boundaries. (Any three)

- 13.** “The textile industry is the only industry in the country which is self-reliant and complete in the value chain.” Justify the statement.

Ans. The textile industry is considered as self-reliant because products produced at each stage are used as raw materials for next stage of production. Value chain refers to a number of

activities that industry performs right from the production of raw materials to the delivery of finished products and add substantial value to that product at each stage of processing.

OR

“Industrialisation and urbanisation go hand in hand”. Validate the statement.

Ans. (i) After an industrial activity starts in a town, urbanisation follows. Industry provides employment to the people of the area. Population migrates from rural hinterlands to seek jobs. Housing and transport facilities are developed to accommodate these people. Other infrastructural developments take place leading to growth and development of the town into a city.

(ii) Sometimes industries are located in or near the cities.

(iii) Cities provide markets for manufactured goods.

(iv) Cities provide various services like banking and insurance etc. (Any three)

14. Explain with examples the interdependence of agriculture and industries.

Ans. The interdependence of agriculture and industries is based on many things like adequate rainfall and good crops.

Some of the examples are when the rain fail, the crops fail, the industries suffer and we have losses in our business as the purchasing power falls.

If the cotton crops fail the clothing industries suffer and the other industries also suffer.

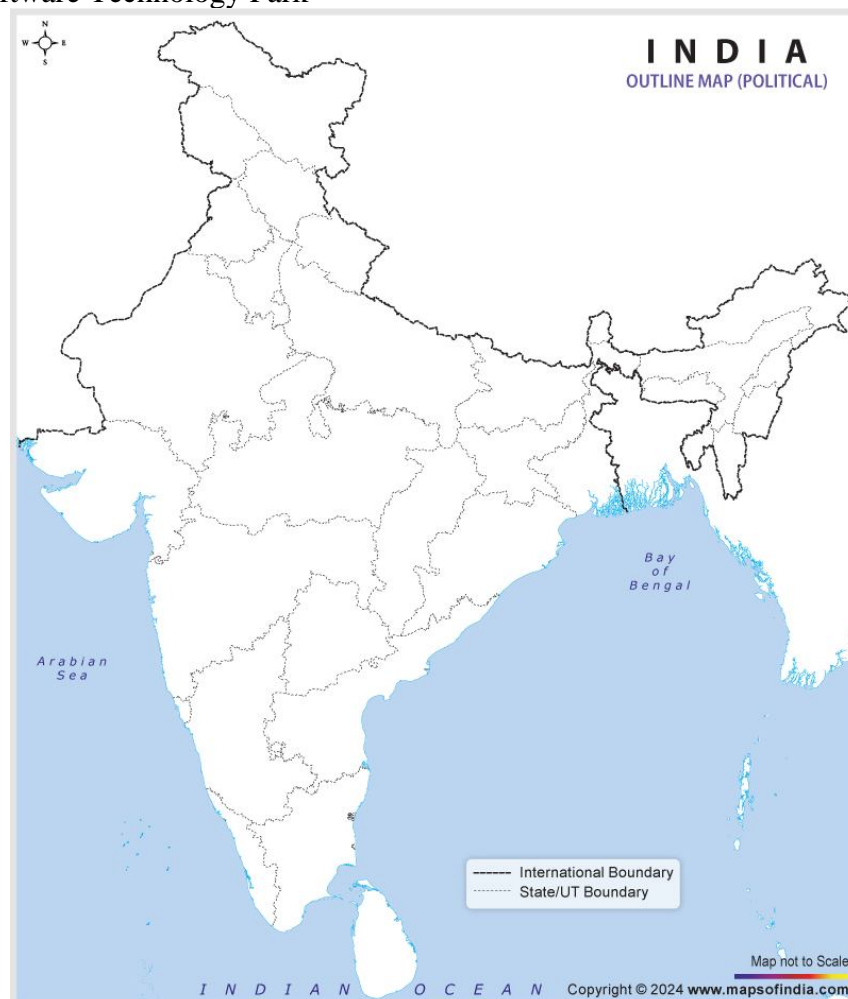
If the poultry farms does not produce enough eggs the bakery industries which use egg as their important ingredient also suffers.

15. On the given Political outline map of India, locate and label the following with appropriate symbols:

(a) Durgapur—Iron and Steel Plant

(b) Jamshedpur—Iron and Steel Plant

(c) Noida—Software Technology Park



Ans.



SECTION – D

Questions 16 to 17 carry 5 marks.

16. Describe any five factors responsible for the concentration of iron and steel industry in and around Chota Nagpur Plateau region.

Ans. Chotanagpur region is the hub of many iron and steel plants because:

- (i) Iron and steel industry requires iron ore, coal, limestone and manganese which are available in close proximity.
- (ii) Good network of roads and railway facilitates the movement of raw materials to iron and steel plants.
- (iii) Rivers provide the cheapest means of inland water transport for iron and steel goods.
- (iv) Nearness to the city of Kolkata provides huge market, banking, insurance and financial services for iron and steel plants.
- (v) Availability of cheap labour from Bihar, West Bengal, Jharkhand and Chhattisgarh.
- (vi) Hence due to these locational advantages iron and steel plants like Jamshedpur, Durgapur, Burnpur, Bokaro and Rourkela are confined to the Chhotanagpur region.

OR

Manufacturing sector is considered as the ‘backbone of general and economic development.’ Examine the statement in the context of India.

Ans. Manufacturing sector is considered as the backbone of development in general and economic development to India in the following ways :

- (i) Manufacturing industries not only help in modernising agriculture, which forms the backbone of our economy, they also reduce the heavy dependence of people on agricultural income by providing them jobs in secondary and tertiary sectors.
- (ii) Industrial development is a precondition for eradication of unemployment and poverty from our country.

(iii) This was the main philosophy behind public sector industries and joint sector ventures in India. It was also aimed at bringing down regional disparities by establishing industries in tribal and backward areas.

(iv) Export of manufactured goods expands trade and commerce, and brings in much needed foreign exchange to India.

17. How are industries responsible for environmental degradation in India? Explain with examples.

Ans. Industries are responsible for environmental degradation in the following ways:

(i) Many times pollution norms are not followed by the industries. The effluents are not treated before they discharge into air or water bodies.

(ii) Toxic gas leaks can be very hazardous with long-term effects; as happened after the Bhopal Gas tragedy. Hence meticulous maintenance of equipment is necessary.

(iii) Thermal pollution of water occurs when hot water from factories and thermal plants is drained into rivers and ponds before cooling; this greatly harms the aquatic plants and animals.

(iv) They release toxic dyes, detergents, acids, salts and heavy metals like lead and mercury, various pesticides, fertilisers, synthetic chemicals, plastics and rubber etc., into the water bodies.

(v) Mismanagement of wastes from nuclear power plants can cause cancers and birth defects.

(v) Countries that transform their raw materials into a wide variety of furnished goods of higher value are prosperous. India's prosperity lies in increasing and diversifying its manufacturing industries as quickly as possible.

OR

Examine the multi-pronged aspects of Information Technology and Electronics Industry.

Ans. (i) The electronics industry produces a wide range of goods like television, telephones, radars, computers etc.

(ii) It has contributed to a lot of foreign exchange.

(iii) It has provided employment to more than one million people.

(iv) Bengaluru is the electronic capital of India followed by Mumbai and Hyderabad. There are 18 software technology parks in India.

(v) The fast growing BPO sector of IT is a major foreign exchange earner for the country.

SECTION – E (Case Study Based Questions)

Questions 18 carry 4 marks each.

18. Read the case given below carefully and answer the questions that follow:

NTPC shows the way

NTPC is a major power providing corporation in India. It has ISO certification for EMS (Environment Management System) 14001. The corporation has a pro-active approach for preserving the natural environment and resources like water, oil, gas and fuels in places where it is setting up power plants. This has been possible through



- (a) Optimum utilisation of equipment adopting latest techniques and upgrading existing equipment.
 - (b) Minimising waste generation by maximising ash utilisation.
 - (c) Providing green belts for nurturing ecological balance and addressing the question of special purpose vehicles for afforestation.
 - (i) Which is the major power providing corporation in India? (1)
 - (ii) Name the institution which issues ISO certification for Environment Management System. (1)
 - (iii) Explain the pro-active approach of NTPC for preserving the natural environment. (2)
- Ans. (i) NTPC is the major power providing corporation in India, which is expanded as National Thermal Power Corporation.
- (ii) An ISO certification in India can be issued by a third party certification body that is accredited by the National Accreditation Board of certification.
 - (iii) (a) Optimum utilisation of equipment adopting latest techniques and upgrading existing equipment.
 - (b) Minimising waste generation by maximising ash utilisation.
 - (c) Providing green belts for nurturing ecological balance and addressing the question of special purpose vehicles for afforestation.
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