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CLASS X · SOCIAL SCIENCE (087) · GEOGRAPHY · CBSE BOARD EXAMINATION 2027

GEOGRAPHY · CHAPTER 6

Manufacturing Industries

Chapter Practice Booklet · Questions only

15 note blocks + industries table | 19 map items | PYQs 2025–2026 | 68 practice questions | Model Answer Booklet

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STUDENT DETAILS

NAME _____

CLASS & SECTION _____

ROLL NO. _____

BOOKLET STARTED ON _____

CHAPTER TEST SCORE _____ / 20

1

READ THIS FIRST

Chapter Notes

The whole chapter in short-note form: why manufacturing matters, location and classification of industries, each major industry, and pollution and its control. Revise from here – you should not need the textbook again.

1 What is manufacturing?

- **Manufacturing** is the production of goods in **large quantities** after processing raw materials into **more valuable** products – paper from wood, sugar from sugarcane, steel from iron ore, aluminium from bauxite.
- People in manufacturing work in the **secondary sector**.
- A country's economic strength is measured by the development of its manufacturing industries.

2 Importance of manufacturing: the backbone of development

- It helps **modernise agriculture**, which is the backbone of our economy.
- It reduces heavy **dependence on farm income** by giving jobs in the secondary and tertiary sectors.
- Industrial development is a **precondition for removing unemployment and poverty** – the idea behind public and joint sector industries; industries in tribal and backward areas also aimed to reduce **regional disparities**.
- **Export** of manufactured goods expands trade and brings **foreign exchange**.
- Countries that turn raw materials into a wide range of **higher-value** goods are prosperous. India's prosperity lies in increasing and **diversifying** its manufacturing quickly.

3 Agriculture and industry go hand in hand

- They are **not exclusive** of each other – they move together.
- **Agro-industries** have boosted agriculture by raising its **productivity**.
- Industries **depend on agriculture** for raw materials – cotton, jute, sugarcane, oilseeds.
- Industries **sell to farmers** – irrigation pumps, fertilisers, insecticides, pesticides, PVC pipes, machines and tools.
- A competitive manufacturing sector has helped farmers raise production and made processes more **efficient**.

4 Contribution to the national economy

- As per the textbook, the share of manufacturing has stayed at about **17% of GDP** (out of about 27% for all industry, which includes about 10% for mining, quarrying, electricity and gas).
- Growth was about **7% a year** over a decade; the desired rate is **12%**. Since 2003, manufacturing has grown at 9–10% a year.
- The government set up the **National Manufacturing Competitiveness Council (NMCC)** to improve productivity through policy.

5 Industrial location

- Location is influenced by **raw material, labour, capital, power and market**. All are rarely found at one place, so industry locates where these can be had at the **lowest cost**. **Government policy** and **specialised labour** also matter.
- **Industrialisation and urbanisation go hand in hand.** After an industry starts, a town grows around it; cities give markets and services – banking, insurance, transport, labour, consultants.
- When many industries come together to use the advantages of a city, it is called **agglomeration economies**.
- Before Independence, most units were set up near **ports** for overseas trade – **Mumbai, Kolkata, Chennai** – so industrial pockets grew amid large rural hinterlands.

6 Classification of industries

Basis	Types and examples
Source of raw material	**Agro-based** – cotton, woollen, jute, silk textiles, rubber, sugar, tea, coffee, edible oil; **mineral-based** – iron and steel, cement, aluminium, machine tools, petrochemicals
Main role	**Basic or key** – supply raw material to other industries (iron and steel, copper and aluminium smelting); **consumer** –

	goods for direct use (sugar, toothpaste, paper, sewing machines, fans)
Capital investment	**Small-scale** – investment within the limit fixed by law (one crore rupees as per the textbook); **large-scale** – above it
Ownership	**Public** – BHEL, SAIL; **private** – TISCO, Bajaj Auto, Dabur; **joint** – Oil India Ltd (OIL); **cooperative** – owned by producers or workers, e.g. **sugar in Maharashtra**, **coir in Kerala**
Bulk and weight	**Heavy** – iron and steel; **light** – electrical goods

7 Textile industry and cotton textiles

- The textile industry holds a **unique position**: a large share of industrial production, **employment** (second only to agriculture) and **foreign exchange**. It is the only industry that is **self-reliant and complete in the value chain** – from raw material to the highest value-added products.
- In ancient India cotton cloth was made by **hand spinning and handloom**; power-looms came after the 18th century. Traditional weaving suffered in colonial times against **mill cloth from England**.
- First successful textile mill: **Mumbai, 1854**. The industry got a boost during the two **World Wars**.
- Early mills were in the **cotton belt of Maharashtra and Gujarat** because of raw cotton, market, transport and ports, labour and a **moist climate**.
- It supports cotton farmers, boll pluckers and workers in ginning, spinning, weaving, dyeing, designing, packaging and tailoring, and creates demand for chemicals, dyes and engineering.
- **Spinning** is centralised in Maharashtra, Gujarat and Tamil Nadu; **weaving** is decentralised (handloom, powerloom, mills) to use traditional skills. Hand-spun **khadi** gives large-scale home employment.
- India has world-class **spinning** (a large share of world cotton-yarn trade; yarn goes to **Japan**), but weaving cannot use much of the high-quality yarn, and India's share in world **garment** trade is small.
- **Problems: erratic power**, machinery needing **upgradation** in weaving and processing, **low labour output**, competition from **synthetic fibres**.

8 Jute textiles

- India is the **largest producer** of raw jute and jute goods and the **second largest exporter** after **Bangladesh**.
- Most mills are in **West Bengal**, along the **Hugli** in a narrow belt (98 km × 3 km). First mill: near Kolkata at **Rishra, 1855**.
- After Partition (1947) the mills stayed in India but **three-fourths of the jute-growing area** went to East Pakistan (Bangladesh).
- **Why the Hugli basin?** Nearness to jute areas; cheap **water transport** plus rail and road; plenty of **water** for processing; **cheap labour** from West Bengal, Bihar, Odisha and UP; **Kolkata** gives banking, insurance and a port.
- **Challenges:** competition from **synthetic substitutes** and from Bangladesh, Brazil, Philippines, Egypt, Thailand.
- **Hope:** mandatory jute packaging raised home demand; the **National Jute Policy (2005)** aims at better productivity, quality and prices for farmers; world demand for **biodegradable** materials helps jute.

9 Sugar industry

- India is the **second largest producer of sugar** but **first in gur and khandsari**.
- The raw material is **bulky** and loses **sucrose** during transport, so mills are near cane fields.
- About **60% of mills are in UP and Bihar**; the rest in Maharashtra, Karnataka, Tamil Nadu, AP, Gujarat, Punjab, Haryana, MP.
- The industry is **seasonal**, so it suits the **cooperative sector**.
- Mills are shifting to the **south and west**, especially **Maharashtra**: cane has **higher sucrose**, a **cooler climate** gives a longer crushing season, and **cooperatives** are more successful there.
- **Challenges:** seasonal work, **old, inefficient methods**, **transport delays**, and the need to make the best use of **bagasse**.

10 Iron and steel industry

- A **basic industry**: all other industries – heavy, medium and light – depend on it for machinery. Steel is needed for engineering goods, construction, defence, medical and scientific equipment and consumer goods. Its production and use are an **index of development**.
- A **heavy industry**: raw materials and finished goods are heavy and bulky, so **transport costs** are high.
- Raw materials: **iron ore, coking coal and limestone** in the ratio of about **4 : 2 : 1**; some **manganese** hardens the steel.
- Process: ore, coke and limestone go into a **blast furnace → pig iron** → steel making (with manganese, nickel, chromium) → rolling, pressing, casting and forging.
- India is the **second largest crude steel producer** (after China) and the **largest producer of sponge iron**; but per capita steel use is well below the world average.
- Public sector steel is sold through **SAIL**; TISCO sells as **Tata Steel**.
- The **Chota Nagpur plateau** has the most plants: low-cost iron ore, **high-grade raw materials close by**, cheap labour and a big home market.
- **Problems:** high cost and limited supply of **coking coal**; **low labour productivity**; **irregular energy supply**; **poor infrastructure**. Liberalisation and FDI have helped; more **R&D** is needed.

11 Aluminium, chemicals, fertilisers, cement

- **Aluminium smelting** – the **second most important metallurgical industry**. Aluminium is light, resists corrosion, conducts heat, is malleable and becomes strong when mixed with other metals – used for **aircraft, utensils, wires**; a substitute for steel, copper, zinc and lead. Plants in Odisha, West Bengal, Kerala, UP, Chhattisgarh, Maharashtra, TN. Key location factors: **regular electricity** and **assured bauxite** at low cost.
- **Chemicals** – about **3% of GDP**; **third largest in Asia**, twelfth in the world. **Inorganic**: sulphuric acid, nitric acid, alkalies, soda ash, caustic soda – widely spread. **Organic**: petrochemicals for synthetic fibres, rubber, plastics, dyes, drugs – located **near refineries**. The industry is its **own largest consumer**.
- **Fertilisers** – nitrogenous (mainly **urea**), phosphatic, DAP and complex (N, P, K). **Potash is entirely imported**. India is the **third largest producer** of nitrogenous fertilisers. Expanded after the **Green Revolution**; Gujarat, TN, UP, Punjab and Kerala give half the output.
- **Cement** – for houses, factories, bridges, roads, airports, dams. Raw materials: **limestone, silica, gypsum**, with coal, power and rail. First plant: **Chennai, 1904**. Price and distribution **decontrol (1989)** boosted it; exports go to East Asia, Middle East, Africa, South Asia; plants in **Gujarat** have access to Gulf markets.

12 Automobiles and IT–electronics

- **Automobiles** carry goods, services and passengers quickly. After **liberalisation**, new models raised demand and the industry took a **quantum jump** in under 15 years; **FDI** brought new technology. Centres: Delhi, **Gurugram**, Mumbai, **Pune**, **Chennai**, Kolkata, Lucknow, Indore, Hyderabad, Jamshedpur, Bengaluru.
- **IT and electronics** – from transistor sets and TVs to telephones, cellular telecom, radars and computers. **Bengaluru** is the **electronic capital of India**; other centres: Mumbai, Delhi, Hyderabad, Pune, Chennai, Kolkata, Lucknow, Coimbatore.
- **Software technology parks** give a **single-window service** and high-speed data links to software experts.
- Impact: big **employment** (a good share of women) and **foreign exchange** from the fast-growing **BPO** sector; growth in **hardware and software** is the key to success.

13 Industrial pollution

Type	Causes and effects
Air	gases like **sulphur dioxide and carbon monoxide**, dust, mist and smoke from chemical and paper factories, brick kilns, refineries, smelters and fossil fuels; toxic **gas**

	leaks have long-term effects; harms people, animals, plants and buildings
Water	organic and inorganic **effluents** from paper, pulp, chemical, textile and dyeing units, refineries, tanneries and electroplating – dyes, acids, salts, **lead and mercury**; solid wastes – fly ash, phospho-gypsum, slag; **thermal pollution** when hot water is drained into rivers; nuclear waste causes cancers and birth defects
Land	dumping of glass, chemicals, packaging, salts and garbage makes soil useless; rain carries pollutants down to **groundwater**
Noise	machinery, generators, saws, drills – irritation, stress, **hearing loss**, higher heart rate and blood pressure

14 Control of environmental degradation

- Every litre of industrial waste water pollutes about **eight times** as much fresh water.
- **Water**: reuse and **recycle** water in successive stages; **harvest rainwater**; **treat** hot water and effluents before release; **regulate** over-drawing of groundwater by law.
- Effluent treatment in **three stages**: **primary** – mechanical (screening, grinding, flocculation, sedimentation); **secondary** – biological; **tertiary** – biological, chemical and physical, including recycling of waste water.
- **Air**: fit smoke stacks with **electrostatic precipitators, fabric filters, scrubbers and inertial separators**; use **oil or gas** instead of coal.
- **Noise**: **silencers** on generators, redesigned quieter and efficient machines, **noise-absorbing material**, ear plugs.

15 NTPC shows the way

- **NTPC**, a major power corporation, has **ISO 14001** certification for its Environment Management System.
- (a) **Optimum use of equipment** with the latest techniques and upgrading; (b) **less waste** by maximising **ash utilisation**; (c) **green belts** and afforestation; (d) **ash pond management**, ash-water recycling and liquid waste management; (e) **ecological monitoring** and online databases for all its power stations.

Industries at a glance

MCQ clues and 3-mark 'give reasons' answers come from here

Industry	Type	Key facts	Main centres
Cotton textile	Agro, consumer	first mill Mumbai 1854; spinning strong, weaving weak	Mumbai, Surat, Indore, Kanpur, Coimbatore
Jute	Agro	first mill Rishra 1855; 2nd exporter after Bangladesh	Hugli basin (West Bengal)
Sugar	Agro, seasonal	2nd in sugar, 1st in gur and khandsari	UP, Bihar; shifting to Maharashtra
Iron and steel	Mineral, basic, heavy	ore : coal : limestone = 4 : 2 : 1	Jamshedpur, Bokaro, Durgapur, Bhilai, Vijayanagar, Salem
Aluminium	Mineral, basic	needs cheap power and bauxite	Odisha, Chhattisgarh, Kerala, UP
Chemicals	Mineral	3rd largest in Asia; own largest consumer	organic units near refineries
Fertilisers	Chemical	potash fully imported	Gujarat, TN, UP, Punjab, Kerala
Cement	Mineral	first plant Chennai 1904; decontrol 1989	Gujarat (Gulf markets)
Automobiles	Mineral, consumer	quantum jump after liberalisation; FDI	Gurugram, Pune, Chennai, Jamshedpur
IT and electronics	Knowledge-based	BPO earns foreign exchange	Bengaluru – electronic capital

Key terms

1- and 2-mark answers

Manufacturing – making goods in large quantities by processing raw materials into more valuable products

Agro-based industry – uses plant and animal products as raw material

Mineral-based industry – uses minerals and metals as raw material

Basic / key industry – supplies raw material or products to other industries

Consumer industry – makes goods for direct use by people

Joint sector – run jointly by the government and private firms, e.g. Oil India Ltd

Cooperative sector – owned by producers, suppliers or workers who share profits

Agglomeration economies – advantages industries gain by clustering in a city

Value chain – steps from raw material to finished, high-value product

Pig iron – iron from the blast furnace before steel making

Sponge iron – iron made by direct reduction of ore, without melting

Bagasse – fibrous waste left after crushing sugarcane

Software technology park – zone giving single-window service and fast data links to IT firms

Thermal pollution – hot water from factories drained into rivers and ponds

Electrostatic precipitator – device that removes dust particles from factory smoke

Exam snapshot

What the board asks, and how to prepare

SYLLABUS 2026–27

- Importance of manufacturing; contribution to the economy; industrial location; classification
- Major industries: textiles, sugar, iron and steel, aluminium, chemicals, fertilisers, cement, automobiles, IT; pollution and its control
- **Map:** cotton textile centres, iron and steel plants and software technology parks (locate and label)

BOARD WEIGHTAGE

20 / 80

Geography is Section B (Q10–Q19). 2025 (32/1/1) gave **Q31, a 5-mark question with both choices** from this chapter (backbone of development; agriculture and industry), and a **steel plant** on the map. In the 2026 papers we read it came **only on the map** (software park). Expect **1–6 marks**, with the map item almost every year.

MOST ASKED IN BOARD PAPERS, 2025–2026 (3 PAPERS READ IN FULL)

How often	Topic / question type	Marks	Papers
★★★	Map: textile centres, steel plants, software parks	1	2 of 3
★★☆	Manufacturing as the backbone of development	5	1 of 3
★★☆	Agriculture and industry complement each other	5	1 of 3
★★☆	Classification of industries (ownership, raw material, role)	1–3	NCERT core
★★☆	Pollution and its control; NTPC	3–5	NCERT core
★☆☆	Location of jute, sugar, iron and steel; problems of each	3	NCERT core

ANSWER-WRITING RULES FOR SOCIAL SCIENCE (CBSE 2026–27)

2 marks
Very short answer · up to 40 words · 2 clear points

3 marks
Short answer · up to 60 words · 3 points

4 marks
Case / source based · up to 100 words in all · answer from the source

5 marks
Long answer · up to 120 words · 5 points, with an intro line

Write in points, underline key words, and give one example or date wherever you can. Read every "OR" choice before you start, and attempt only one.

MISTAKES THAT COST MARKS

- Writing 'manufacturing is the backbone' with only one point – give **five**: agriculture, jobs, poverty and regional balance, exports, prosperity.
- Calling sugar a mineral-based or private industry – it is **agro-based** and largely **cooperative** in Maharashtra.
- Mixing ownership examples: **SAIL, BHEL – public**; **TISCO, Dabur – private**; **OIL – joint**; **coir, sugar – cooperative**.
- Writing the steel ratio as 1 : 2 : 4 – it is ore : coking coal : limestone = **4 : 2 : 1**.
- Listing only air pollution – the chapter names **four types**: air, water, land, noise.
- Placing Salem or Vijayanagar wrongly on the map: **Salem – Tamil Nadu**, **Vijayanagar – Karnataka**, **Bhilai – Chhattisgarh**.

HOW TO USE THIS BOOKLET

1. **Day 1:** Read the Chapter Notes twice; learn the key terms.
2. **Next day:** Parts A and B. **Then:** Parts C and D – MUST DO questions first.
3. Part E: mark every map item on a fresh outline map of India.
4. Check every answer against the **Model Answer Booklet**: same points, same keywords, within the word limit.
5. Write every mistake on the My Mistakes page and redo it after 3 days.

A

PART A · NCERT PRACTICE

Textbook Check

Every section of the chapter and every NCERT exercise idea, asked in new words. Model answers for all of these are in the Model Answer Booklet.

Importance and location

A1. What is manufacturing? Give two examples. [2]

A2. Why is manufacturing considered the backbone of development? Give three reasons. MUST DO [3]

A3. "Agriculture and industry are not exclusive of each other." Explain. MUST DO [3]

A4. What is the share of manufacturing in India's GDP? What step was taken to raise its growth? [2]

A5. Name the factors that affect the location of an industry. MUST DO [2]

A6. "Industrialisation and urbanisation go hand in hand." Explain. [3]

Classification

A7. Classify industries on the basis of ownership with one example each. MUST DO [3]

A8. Distinguish between basic and consumer industries. MUST DO [2]

A9. Distinguish between agro-based and mineral-based industries. [2]

Agro-based industries

A10. Why does the textile industry hold a unique position in India's economy? MUST DO [3]

A11. Why were early cotton mills set up in Maharashtra and Gujarat? MUST DO [3]

A12. State three problems of the cotton textile industry. [3]

A13. Give reasons for the concentration of jute mills in the Hugli basin. MUST DO [3]

A14. State the challenges and the hopes of the jute industry. [3]

A15. Why is the sugar industry shifting to the southern and western states? MUST DO [3]

Mineral-based and other industries

A16. Why is iron and steel called a basic and a heavy industry? MUST DO [2]

A17. Why is the Chota Nagpur plateau the main centre of the iron and steel industry? MUST DO [3]

A18. Why has India not performed to its full potential in steel production? [3]

A19. State two uses of aluminium and two factors for locating aluminium plants. [2]

A20. Distinguish between inorganic and organic chemical industries. [3]

A21. How has the IT and electronics industry helped India? [3]

Pollution and control

A22. Name the four types of industrial pollution with one cause each. MUST DO [2]

A23. Describe the three stages of treating industrial effluents. [3]

B

PART B · SECTION B STYLE

Objective Practice

All the MCQ types used in the board paper: matching industries, ownership and classification, statements and assertion–reason.

ASSERTION–REASON: HOW TO ANSWER

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

Multiple choice

1 mark each

B1. Match the industries with their ownership: [1]
(a) SAIL (b) Dabur (c) Oil India Ltd (d) Coir units of Kerala
(i) joint (ii) cooperative (iii) public (iv) private

(a) a-iii, b-iv, c-i, d-ii
(b) a-iv, b-iii, c-i, d-ii
(c) a-iii, b-iv, c-ii, d-i
(d) a-i, b-iv, c-iii, d-ii

B2. The first successful cotton textile mill in India was set up in: [1]

(a) Kolkata, 1855 **(b)** Mumbai, 1854 **(c)** Chennai, 1904 **(d)** Ahmedabad, 1861

B3. Iron ore, coking coal and limestone are used in steel making in the ratio of about: [1]

(a) 1 : 2 : 4 **(b)** 2 : 1 : 4 **(c)** 4 : 2 : 1 **(d)** 4 : 1 : 2

B4. Which industry is the only one complete in the value chain? [1]

(a) Sugar **(b)** Cement **(c)** Iron and steel **(d)** Textile

B5. Which of these is a consumer industry? [1]

(a) Sewing machines
(b) Iron and steel
(c) Aluminium smelting
(d) Copper smelting

B6. India is the second largest exporter of jute goods after: [1]

(a) China **(b)** Bangladesh **(c)** Brazil **(d)** Egypt

B7. Which fertiliser raw material is entirely imported by India? [1]

(a) Nitrogen **(b)** Phosphate **(c)** Potash **(d)** Urea

B8. Which city is called the electronic capital of India? [1]

(a) Hyderabad **(b)** Pune **(c)** Noida **(d)** Bengaluru

B9. Read the statements: [1]
I. The sugar industry is seasonal in nature.
II. It is ideally suited to the cooperative sector.
Choose the correct option.

(a) Only I is correct
(b) Only II is correct
(c) Both I and II are correct
(d) Neither I nor II is correct

B10. Fitting electrostatic precipitators to smoke stacks reduces: [1]

(a) particulate matter in air (b) noise
(c) thermal pollution of water (d) land pollution

B11. Which steel plant is in Tamil Nadu? [1]

(a) Vijayanagar (b) Salem (c) Bhilai (d) Durgapur

B12. A software technology park in Maharashtra is located at: [1]

(a) Gandhinagar (b) Noida
(c) Pune (d) Thiruvananthapuram

B13. Which steel plant is located in Jharkhand? [1]

(a) Bhilai (b) Salem (c) Durgapur (d) Bokaro

B14. Cement plants in Gujarat have an advantage because of: [1]

(a) access to markets in the Gulf countries (b) nearness to coalfields
(c) cheap hydel power (d) the National Jute Policy

B15. In which treatment stage of effluents is waste water recycled? [1]

(a) Primary (b) Tertiary (c) Secondary (d) Mechanical

B16. Which pair is correctly matched? [1]

(a) Bhilai – Odisha (b) Coimbatore – Kerala
(c) Kanpur – Madhya Pradesh (d) Surat – Gujarat

Assertion–Reason

1 mark each

B17. ASSERTION–REASON [1]

Assertion (A): Manufacturing is the backbone of economic development.
Reason (R): It modernises agriculture and creates jobs in the secondary and tertiary sectors.

B18. ASSERTION–REASON [1]

Assertion (A): Sugar mills are located near the cane fields.
Reason (R): Sugarcane loses sucrose content during long haulage.

B19. ASSERTION–REASON [1]

Assertion (A): The jute industry has a bright future.
Reason (R): The Hugli basin has cheap water transport.

B20. ASSERTION–REASON [1]

Assertion (A): India is the largest producer of crude steel in the world.
Reason (R): India is the largest producer of sponge iron.

C

PART C · BOARD PATTERN

Board Pattern Practice

Written-answer questions grouped by topic. ★★★ = asked in 2 or more of the 3 papers read · ★★ = asked once or NCERT core · ★ = supporting topic.

Importance of manufacturing

★★☆ 2025 32/1/1 · 5 marks (Q31)

C1. "Manufacturing sector is considered the backbone of development." Justify with five points. [5]

MUST DO

C2. "Agriculture and industry complement each other." Explain with five points. MUST DO [5]

Classification and location

★★☆ NCERT core · 1–3 marks

C3. Classify industries on any three bases with examples. MUST DO [3]

C4. Why did most industries before Independence develop near Mumbai, Kolkata and Chennai? [3]

Agro- and mineral-based industries

★★☆ NCERT core · 3–5 marks

C5. Explain the factors for the location of the cotton textile and jute industries. [5]

C6. Describe the importance and problems of the iron and steel industry in India. MUST DO [5]

C7. State three challenges faced by the sugar industry. [3]

Pollution and its control

★★☆ NCERT core · 3–5 marks

C8. How do industries pollute the environment? Explain with five points. MUST DO [5]

C9. Suggest measures to control industrial pollution. MUST DO [5]

C10. How is NTPC preserving the environment? MUST DO [3]

D

PART D · CASE-BASED STYLE

Case-Based Questions

Each case carries 4 marks (1 + 1 + 2), as in Q18 of the board paper.

D1. Case-Based · From Field to Factory [4]

Farmers near a town in western Maharashtra sell their cane to a mill that they own together. The mill sells sugar, and the farmers buy fertilisers, sprinklers and a tractor with the profits. The mill runs only from November to April.

(i) Name the sector of ownership of this mill. [1]

(ii) Why does it run only part of the year? [1]

(iii) How do agriculture and industry help each other here? Two points. [2]

D2. Case-Based · The Golden Riverbank [4]

Along a busy river near a great eastern port city, old mills stand side by side in a strip barely three kilometres wide. Boats bring bundles of shiny fibre from the villages, and sacks leave by ship for many countries.

(i) Name the industry and the river. [1]

(ii) Name the country that is the biggest exporter of this product. [1]

(iii) Give two reasons for the location of these mills here. [2]

D3. Case-Based · Fire and Iron [4]

In a plant on the Chota Nagpur plateau, wagons tip iron ore, coke and limestone into a towering furnace. Molten metal flows out and is later rolled into sheets. The plant gets its ore and coal from mines within a short distance.

(i) Name the furnace and its first product. [1]

(ii) Why is this called a heavy industry? [1]

(iii) Give two reasons for the concentration of this industry on the plateau. [2]

D4. Case-Based · Dark River [4]

Below a leather tanning cluster, a river turns dark and frothy. Fish have died, and villagers downstream complain of skin rashes. An inspector orders the units to set up a common treatment plant.

(i) What type of pollution is shown? [1]

(ii) Name two harmful substances such units release. [1]

(iii) Describe two stages of the treatment plant. [2]

D5. Case-Based · City of Code [4]

A young engineer moves to a city in Karnataka known for its electronics firms. Her company works from a park that offers a single window for permissions and fast data links, and serves clients in the USA through the night.

(i) Name the city and the kind of park. [1]

(ii) Which sector earns foreign exchange through such night work? [1]

(iii) Give two contributions of this industry to India. [2]

PART E · MAP SKILL

E Map Work: Industries

Cotton textile centres, iron and steel plants and software technology parks from the CBSE map list (locate and label).

WHAT THE BOARD ASKS

Q19 (3 marks) gives four map items from the whole Geography list; you **locate and label any three**. 2026 (32/1/1 Q19) asked a **software technology park in Maharashtra**; 2025 (32/1/1 Q37(b)) asked an **iron and steel plant in Jharkhand**.

Locate and label	What to remember
☐ Mumbai – cotton textile	First mill, 1854
☐ Indore – cotton textile	Malwa plateau
☐ Surat – cotton textile	Gujarat cotton belt
☐ Kanpur – cotton textile	Ganga plains
☐ Coimbatore – cotton textile	South India's textile hub
☐ Durgapur – iron and steel	Damodar valley
☐ Bokaro – iron and steel	Chota Nagpur plateau
☐ Jamshedpur – iron and steel	TISCO, Tata Steel
☐ Bhilai – iron and steel	Near Durg ore
☐ Vijayanagar – iron and steel	Near Ballari ore
☐ Salem – iron and steel	Southern plant
☐ Noida – software park	Near Delhi
☐ Gandhinagar – software park	State capital
☐ Mumbai – software park	West coast
☐ Pune – software park	Inland, east of Mumbai
☐ Hyderabad – software park	Deccan
☐ Bengaluru – software park	Electronic capital
☐ Chennai – software park	East coast
☐ Thiruvananthapuram – software park	Southern tip

Practice drill – use one fresh outline map of India for each round

1. Round 1: the five cotton textile centres.
2. Round 2: the six iron and steel plants – say the state of each.
3. Round 3: the eight software technology parks; then all 19 from memory.

PART F · REAL BOARD QUESTIONS

F Board PYQ Index

Real questions from recent Social Science board papers, by topic. Open the official paper and attempt the listed questions.

Frequency	Topic	Marks	Where asked (year: paper code, question number)	Practise here
★★★	**Map: textile centres, steel plants, software parks**	1	**2026:** 32/1/1 Q19 (software park in Maharashtra) · **2025:** 32/1/1 Q37(b) (steel plant in Jharkhand)	B11–B13, B16, D3, D5, map work
★★☆	**Manufacturing as the backbone of development**	5	**2025:** 32/1/1 Q31(A)	A1–A2, B17, C1
★★☆	**Agriculture and industry complement each other**	5	**2025:** 32/1/1 Q31(B)	A3, C2, D1
★★☆	**Classification and location of industries**	1–3	Not asked in the papers read – NCERT core.	A4–A9, B1, B5, C3–C4
★★☆	**Textile, jute, sugar, steel and other industries**	1–5	Not asked in the papers read – NCERT core.	A10–A21, B2–B4, B6–B9, B14, B18–B20, C5–C7, D2
★★☆	**Pollution and its control; NTPC**	3–5	Not asked in the papers read – NCERT core.	A22–A23, B10, B15, C8–C10, D4

Papers read in full (3): 2026 – 32/1/1, 32/5/1 · 2025 – 32/1/1. The 2026 32/5/1 copy we used had only Q1–Q18 verified, so its map question is not listed. Download official papers from cbse.gov.in → Previous Year Question Papers.

PART G · YOUR RECORD

G My Mistakes

Write down each mistake from this chapter, including the Sunday Chapter Test.

Every wrong answer is a free lesson. Write it here, find the point you missed, and redo the question after three days.

Date	Part & Q No.	What went wrong	Correct point or fact	Redone ✓