

CLASS – X
LESSON PLAN GEOGRAPHY
Ch. 5 MANUFACTURING INDUSTRIES.

Unit	GEOGRAPHY
Class Transaction	Total: 8 periods (approx. 40 min each)
Pre-requisite for the course	This lesson requires 1. Basic knowledge about secondary sector . 2. Knowledge of interdependence of agriculture and industries. 3. Knowledge that all are not harmful
Assessment of qualifying knowledge	1. Written test 2. Group Discussion 3. HW notebook 4. Map activity
Objective	Learners will understand the importance various types of industries of India and their contribution in the economy.
Learning Outcomes	<u>KNOWLEDGE-</u> <i>Students will learn about</i> • Understand the importance various types of industries of India and their contribution in the economy. • <u>Classify industries on the different attributes.</u> • Understand that economic strength of the country is measured by the development of manufacturing industries. • Understand factors responsible for the location of industries. • Understand why textile industry occupies unique position in the India economy. • Discuss various types challenges faced by different industries. • How industries are responsible for environmental degradation. • To develop awareness towards steps to be taken to minimize environmental degradation by industries. <u>SKILLS-</u> <i>Students will critically think about how industries are responsible for environmental degradation and what steps can be taken to conserve environment by industrial pollution with 90% accuracy.</i> • • Students will develop <i>citizenship</i> by taking various steps to conserve environment by industrial pollution

	• <i>Students would be able to enhance their creativity by creating mind map for entire chapter and Locate cotton, iron and steel industry and software tech park on the political map of India</i> • <i>Students would be able to enhance their collaborative skills by sitting together and participating discussion of the chapter.</i>
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Active Learning Group learning- Questioning- <i>Pose, pause, pounce and bounce-</i> Teacher will prepare a list of question about the different industries resources and will ask these questions during discussions by posing the question to the entire class, pause for 30 seconds and then pounce the question and facilitator can bounce it as well to other students.. (Critical thinking, Communication) Demonstration- Marking of different industries: cotton, iron and steel, software technology parks on political map of India. Think-pair -share- Students in group of two will read the topic again after teacher explanation, think for a minute and then discuss in pair. <i>Guided practice followed by Independent Practice-</i> NCERT questions to be discussed in the classroom. Inside outside circle: This activity will take place for recap of previous class. Students will stand in two concentric circles with students facing each other. Students are paired up with someone directly across from them in the other circle. Pairs discuss questions and when the facilitator indicates to move on , the students in the outside circle take one step to the right and make new partners with the participate across from them in the inside circle . a new question is asked , and new partners discuss until the next time to move . when everyone has had a chance to talk to each person around the circle Transaction would proceed in the following manner • Topic- location of different agro based and mineral based industries • Industrial pollution (Competencies: Critical thinking and collaborative) Students will sit together and critically analyses why different industries are located at different places. Group Learning

	• Division of chapter into different groups. Class will be divided into eight groups . Group 1 – Classification of industries Group 2 Agro based: cotton industry. Group 3 Agro based : sugar industry Group 4 Agro based : jute industry Group 5 mineral based industry: iron and steel industry Group 6 mineral based industry : automobile and informatin tech industry Group 7 Industrial pollution and environmental degradation Group 8 control of environmental degradation students will sit together and in Collaboration they will discuss the topic given to them • (Competencies: Critical thinking and collaboration) Students will be divided into 8groups (8 x 5). Each group will study their own topic. And critically analyses the location of industries, done by groups, followed by cross questioning. Differentiation • Topic- Agro and mineral based industries.. (Competencies: Citizenship, Critical thinking) Students will get aware through discussion about location of different industries . Hence, students will analyse the exchange of culture, goods, services and investment inside and outside the country. • Topic- Control of environmental degradation (Competencies: Citizenship) Students will work in group and analyses the steps taken by industries to reduce environment degradation. • Topic -Revision of chapter Students <i>would be able to enhance their creativity</i> by creating mind map for entire chapter using topics and subtopics for each. Questioning- Multiple questions as per spiral and NCERT to cater the needs of various students. Techniques to be used: Think pair share Discussion Group work Mind Map Map work
Resources	Text Book:

	NCERT text book for geography
Self Study, Home Work, Assignments	Independent Practice: Students would do the questions in their H.W notebook HW notebooks to be marked as per the given plan: <i>Assessment Parameters:</i> The total marks for the activity is 5 marks On time submission.....1 mark Presentation/ Neatness.....1 mark Content.....3 marks It is also advised that the students come to the class with proper background knowledge of the topic under discussion. They can refer to the resources stated above.
Assessments	3 UNIT TESTS (critical thinking)5-7 Marks each HALF YEARLY EXAMINATION (critical thinking) 20 Marks ANNUAL BOARD EXAMINATION (critical thinking) 20 Marks INTERNAL ASSESSMENT 20 Marks • Subject Enrichment Activity 5 Marks (creativity and collaboration) • Note Book Submission 05 Marks + HW Notebook 05 marks Through various test students critical thinking, creativity and collaboration skills will be enhanced.
Addressing Classroom Diversity	Due to various social backgrounds and multiple intelligences, the classroom might be a diverse arena. The following techniques can be used for various groups: <i>For gifted students:</i> • High order questions to be done • Encouragement for referring other resources <i>For weak students:</i> • Basic questions to be completed • Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes and formulae, if not written • Call parents at regular intervals • Provide grade-up classes
Marks	The weightage would be given by CBSE.

Assessment questions:	1. Manufacturing sector is considered backbone of the development. Comment on this statement. 2. Classify the industry on the basis of source of raw material, main role, ownership, capital investment. 3. Give any three reasons as to why does cotton textile industry occupies unique position in the Indian economy. 4. Give three reasons as to why sugar mills are shifting towards south. Discuss the factors which are responsible for location of jute industry in the Hugli river basin. 5. Do you agree with the view that the agriculture and industry go hand in hand ?
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CLASS – X
DAY WISE CONSOLIDATED LESSON PLAN
CHAPTER-6 MANUFACTURING INDUSTRIES.
SUBJECT: GEOGRAPHY
SESSION: 2019-20

DAY	ONE
Objective	Students will be able Understand that economic strength of the country is measured by the development of manufacturing industries
Assessment of qualifying knowledge	Questions from the whole class group 1. What do you understand about industries? 2. In which sector manufacturing industries belong? 3. Is manufacturing industries are important for employment ?
Learning Outcomes	• <u>KNOWLEDGE</u>- <i>Students will know</i> that economic strength of the country is measured by the development of manufacturing industries <u>SKILLS and COMPETENCIES</u> <i>Students would be able to critically analyses that economic strength of the country is measured by the development of manufacturing industries in collaboration with each other.</i>
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Anticipatory Set: 10 min Facilitator will ask few questions to introduce the topic 1. What substance/ goods we get from forest? 2. What are the different types of industries ? 3. Are these industries effect our life ?

	Activity : Introduction of industries with the help of interactions with student through Brain storming’ and by asking questions based on their previous knowledge and formation of groups and assigning their topics. So that discussion of the topics (group wise) will take place. Class will be divided into eight. groups . Group 1 – Classification of industries Group 2 Agro based: cotton industry. Group 3 Agro based : sugar industry Group 4 Agro based : jute industry Group 5 mineral based industry: iron and steel industry Group 6 mineral based industry : automobile and informatin tech industry Group 7 Industrial pollution and environmental degradation Group 8 control of environmental degradation students will sit together and in Collaboration they will discuss the topic given to them • Guided Practice- Spiral Level- 1- Questions topic wise Transaction would proceed in the following manner- Anticipatory Set: <u>10 min</u> Facilitator will ask few questions to introduce the topic • What is a market? • What is the transformation in the market? • What are the factors leading to these changes? • What are the lifestyle changes? Discussion of topic through Collaborative Learning: <u>15 min</u> Students will sit together and discuss with each other Independent Practice: Students will go through NCERT GEOGRAPHY text book. • Independent Practice-preparation of group presentation Closure: <u>5 min</u> • Closure- Summarisation by students with the help of mind map on their own.
Resources	Text Book: NCERT text book for Geography
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebook.

Assessments	Oral Test (5 minutes)

DAY	TWO
Objective	Objective : To understand different Classification of industries on the basis of role, capital investment of raw material, raw material . with 90% accuracy.
Assessment of qualifying knowledge	Questions from previous class about industries from the whole class group.
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know</i> different Classification of industries on the basis of role, capital investment of raw material, raw material . with 90% accuracy. <u>SKILLS and COMPETENCIES</u> <i>Students would be able to classify industries on the basis of different attribute , in collaboration with each other.</i>
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Anticipatory Set- Recapitulation of the previous day. Activity- Activity- Class presentation by - Discussion of classification of industries by group no -1 - Discussion of the different examples of industries by the teacher and students . After discussion The following questions will be asked to check their understanding: - Manufacturing sector is considered backbone of the development. Comment on this statement. Topic: Classification of industries - Competency : Critical Thinking and problem solving Citizenship ,Collaboration (Competencies: Critical thinking) Students will be divided into different groups (6 x 5). Each group will study and critically analyse the classification of industries on the basis of different attribute Analysis will be done by groups, followed by cross questioning.

	Independent Practice: Students will go through NCERT text book. • Independent Practice- After discussion All the students will make flow chart to show different classification of industries in their notebooks on their own. Closure: 5 min A short oral test would be taken to check proper assimilation of the topic discussed. Summarization by students with the help of muddiest point
Resources	Text Book: NCERT text book for geography
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebook
Assessments	Oral Test (5 minutes)

DAY	THREE
Objective	Understand the importance of cotton textile industry as a unique industry of India with 95% accuracy. They will also understand the problems and location of cotton industry
Assessment of qualifying knowledge	Questions from previous class
Learning Outcomes	• KNOWLEDGE- <i>Students will know</i> the importance of cotton textile industry as a unique industry of India with 95% accuracy. They will also understand the problems and location of cotton industry in India SKILLS and COMPETENCIES <i>Students would be able to critically analyse</i> the importance of cotton textile industry as a unique industry of India and understand the problems and location of cotton industry in India in collaboration with each other.
Transaction Methodology (The teacher can use the mentioned techniques, wherever)	Transaction would proceed in the following manner- Anticipatory Set- Recapitulation of the previous day Activity Group presentation Group 2 Agro based industry ; cotton textile industry. and compilation will be done teacher

applicable, and can use any other too.)	Guided Practice After discussion • All the students will write about problem faced by cotton industry in their note books • Map activity : children will mark cotton textile industry on political map of India.. The following questions will be asked to check their understanding: • Give any three reasons as to why does cotton textile industry occupies unique position in the Indian economy • Why did cotton textile industry concentrate in the cotton growing belt of Maharashtra and Gujarat, in the early years?(any three reasons) • Why did Mahatma Gandhi lay emphasis on spinning yarn and weaving khadi? • When and where was the first cotton industry established in India. • Why is it important for our country to keep the mill sector loomage lower than power loom and handloom? • Why is it important for us to improve our weaving sector instead of exporting yarn in large quantities? • Why spinning of yarn is centralized and weaving of cloth is decentralize in India. • Topic- Agro based industries (Competencies: Citizenship , Critically , Collaboration) Students will work in group and critically analyse the importance of cotton textile industry as a unique industry if India. Independent Practice: Students will go through NCERT text book. Closure: 5 min A short oral test would be taken to check proper assimilation of the topic discussed. Closure- Summarization by students with the help of mind map
Resources	Text Book: NCERT text book for geography
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebook.
Assessments	Oral Test (5 minutes)

DAY	Four
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Objective	: Understand the various types agro based industries ,their location, problems/challenges
Assessment of qualifying knowledge	Questions from previous class about liberalization policy for whole class group.
Learning Outcomes	• <u>KNOWLEDGE</u>- <i>Students will know</i> the various types agro based industries ,their location, problems/challenges <u>SKILLS and COMPETENCIES</u> <i>Students would be critically analyses the</i> various types agro based industries ,their location, problems/challenges in collaboration with each other.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- • Anticipatory Set- Recapitulation of the previous day. • Teaching strategy (WIPRO)–group presentation , think pair share, , explanation by teacher • Competency : Critical Thinking and problem solving • Citizenship ,Collaboration DOL 1,2,3 Activity- Group presentation by Group 3 sugar industry copper ,Group 4 jute industry and compilation will be done teacher. The following map questions will be asked to check their understanding: • When and where was first jute mill set up in India. • When was national jute policy implemented and what was the objective . • What are the problems faced by sugar industry? • Why sugar mills are shifting towards south and western states? Topic- Day 4 – Subtopic- Agro based industry: sugar and jute industry.. (Competencies: Collaboration, Critical thinking) Students will work in group and critically analyses the location and problems of sugar and jute industries Independent Practice: Students will go through NCERT text book. Closure: 5 min A short oral test would be taken to check proper assimilation of the topic discussed. Summarization by students with the help of flow chart
Resources	Text Book:

	NCERT text book for geography
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebook
Assessments	Oral Test (5 minutes)

DAY	FIVE
Objective	Understand the various types mineral based industries ,their location, problems/challenges. They will also understand why max iron and steel industry are located in Chota Nagpur Plateau region of India.
Assessment of qualifying knowledge	Questions from previous class for whole class group.
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know</i> various types mineral based industries ,their location, problems/challenges. They will also get to know, why max iron and steel industry are located in Chota Nagpur Plateau region of India. <u>SKILLS and COMPETENCIES</u> <i>Students would be able to critically analyses</i> the various types mineral based industries ,their location, problems/challenges. in collaboration with each other.
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Anticipatory Set: <u>10 min</u> Da. Objective: Anticipatory Set- Recapitulation of the previous day. Teaching strategy (WIPRO)–Discussion, think pair share, group presentation - Competency : Critical Thinking and problem solving Citizenship ,Collaboration DOL 1,2,3 Activity- Group presentation of Group 5 iron and steel industry and compiled by teacher explanation The following questions will be asked to check their understanding: - Mention the problems faced iron and steel industry. - Why max iron and steel industry are located Chota Nagpur region. - Mention the steps taken by govt improve iron and steel industry.

	- How many integrated iron and steel are in India? - How mini steel plant is different from integrated steel plant. Topic- mineral based industry : steel and iron industry (Competencies: Collaboration, Critical thinking) Students will work in group and critically analyses the location and problems of iron and steel industry. Independent Practice: Students will go through NCERT text book. Independent Practice- Map activity : Students will mark 10 integrated iron and steel plant on the political map of India Closure: 5 min A short oral test would be taken to check proper assimilation of the topic discussed Summarization by students with the help of mind map .
Resources	Text Book: NCERT text book for geography
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebook
Assessments	Oral Test (5 minutes)

DAY	SIX
Objective	Understand the various types mineral based industries, their location, problems/challenges
Assessment of qualifying knowledge	Questions from the previous class from whole class group.
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know</i> the various types mineral based industries ,their location, problems/challenges <u>SKILLS and COMPETENCIES</u> <i>Students would be able to critically analyses</i> the various types mineral based industries ,their location, problems/challenges, in collaboration with each other.
Transaction Methodology (The teacher can use the mentioned techniques, wherever	Transaction would proceed in the following manner- Anticipatory Set- Recapitulation of the previous day. Activity- Group presentation by Group 6 : automobile and IT industry electricity. . and compilation will be done teacher..

applicable, and can use any other too.)	The following questions will be asked to check their understanding: How IT industry is helpful to increase employment among women. What is BPO? Map activity : Students will locate software technology plants on political map of India. • Closure- Summarization by students with the help of flow chart Competency : • Discussion of topic through Collaborative Learning Critical Thinking and problem solving, Citizenship, Collaboration Topic : Mineral based industry : automobile and IT industry By understanding this topic students will be able to solve the problem of unemployment by the establishment of IT industry. Independent Practice: Students will go through NCERT text book. Closure: <u>5 min</u> A short oral test would be taken to check proper assimilation of the topic discussed.
Resources	Text Book: NCERT text book for Geography
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebook
Assessments	Oral Test (5 minutes)
DAY	Seven
Objective	Students will understand how industries are responsible for environmental degradation. To develop awareness towards steps to be taken to minimize environmental degradation by industries
Assessment of qualifying knowledge	Questions from the Previous class from the whole class
Learning Outcomes	<u>KNOWLEDGE-</u> <i>Students will know</i> how industries are responsible for environmental degradation. To develop awareness towards steps to be taken to minimize environmental degradation by industries

	<u>SKILLS and COMPETENCIES</u> <i>Students would be able to critically analyse how industries are responsible for environmental degradation. what steps to be taken to minimize environmental degradation by industries, in collaboration with each other.</i>
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Anticipatory Set- Recapitulation of the previous day. - Competency : Critical Thinking and problem solving Citizenship ,Collaboration Activity- Group presentation by Group 7 ,Group 8 on industrial pollution and compilation will be done teacher. The following map questions will be asked to check their understanding: - Mention two ways in which industrial pollution is affecting fresh water resources? - Mention the steps taken by govt to control pollution by industries? Closure- Summarization by students with the help of flow chart NCERT Questions to be completed in notebook - Competency : Critical Thinking and problem solving Citizenship ,Collaboration Discussion of topic through Collaborative Learning: <u>15 min</u> Students will critically think about the reasons for industrial pollution and will solve this problem by taking certain steps to control environmental degradation. Independent Practice: Students will go through NCERT text book. Closure: <u>5 min</u> A short oral test would be taken to check proper assimilation of the topic discussed.
Resources	Text Book: NCERT text book for geography
Self Study, Home Work, Assignments	Independent Practice: Students would do the given questions in their H.W. notebook.
Assessments	Oral Test (5 minutes)

Day 8

NCERT Questions and map work

Class Test and doubt clarification class.