

CLASS – VIII
LESSON PLAN
CHAPTER 1- CROP PRODUCTION AND MANAGEMENT

Unit	Biology (Chapter 1 Crop Production and Management)
Class Transaction	Total: 14 periods (approx. 40 min each)
Pre-requisite for the course	This lesson requires the knowledge of 1. How the crops are grown
Assessment of qualifying knowledge	1. Written test 2. Lab activity 3. Group Discussion 4. HW notebook
Objective	Students will be able to: understand the importance of agriculture and the various practices involved in agriculture.
Dimensions of leaning	D1, 2, 3, 4
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> Students will be able to • Importance of agriculture • Various practices of agriculture <u>SKILLS AND COMPETENCIES</u>- <i>Students would be able to</i> • Identify implements involved in agriculture. Attitudes and beliefs- <i>Students will be able to</i> Appreciate the value of farmers of our country.
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- Direct questions to the students Group learning- The class will be divided in the group of 5 students. <i>Circle the Sage</i>- The question will be asked by the teacher and the students who knows the answer will stand at the various corners of the room. (Communication, Collaboration) Differentiation- The students in a group of 5 will do presentation on various practices of agriculture (Character, Citizenship) Questioning- <i>Multiple level question</i>- Teacher will prepare a list of question and will ask these questions during discussions. (Critical thinking, Communication) <i>Brain Storming</i>-The class would start with a discussion on what the

	students have already learnt in the previous classes and hence what is it that they would learn now. They would also be told the significance of the topic that they would be studying. <i>Introduction of the topic-</i> PPT and Digital Content would be shared <i>Guided practice followed by Independent Practice-</i> NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table,compare- contrast matrix), silent/ loud reading, collaborative learning, Research work/surveys
Resources	Text Book: NCERT text book for Science. Reference Book 1. CBSE Exemplar
Closure	1. Define crop. 2. Distinguish between rabi and kharif crops. 3. Predict the result if the amount of water for paddy crops is not in the required amount. 4. Compare the traditional and modern methods of irrigation. 5. Estimate the amount of water required for rabi and Kharif crops. 6. Design an agricultural implement for preparation of soil.
Self Study, Home Work, Assignments	Independent Practice: Students would do the questions in their H.W notebooks as mentioned in the monthly planner by which we can assess their critical thinking and creativity 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(creativity).....1 mark Content(critical thinking and creativity)..... 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	4 UNIT TESTS (25, 25, 25, 25).....100 Marks HALF YEARLY EXAMINATION.....80 Marks ANNUAL BOARD EXAMINATION.....80 Marks INTERNAL ASSESSMENTS.....20 Marks

	PERIODIC TEST By administering pen paper test we assess creativity and critical thinking. By administering pen paper test we assess creativity and critical thinking. Subject Enrichment 10 Marks With the help of subject enrichment activities we assess communication ,collaboration, character building and citizenship Note Book Submission 05 Marks
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> • Encouragement for referring other resources <i>For weak students:</i> • Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes. • Call parents at regular intervals • Provide grade-up classes
Marks	The weightage would be given by CBSE.

Topic	DAY 1 Introduction of agricultural history
Class Transaction	40 min each)
Pre-requisite for the course	This topic requires Basic knowledge of various types of plants, farming and seasons
Assessment of qualifying knowledge	Facilitator asks the students related to agriculture
Objective	Students will be able to understand the importance of agriculture
Dimensions of learning	D1, 2
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> • The importance of agriculture <u>SKILLS AND COMPETENCIES</u>- <i>Students would be able to</i>

	Develop a skill to understand the importance of agriculture. Attitudes and beliefs- <i>Students will be able to</i> <u>Appreciate the importance of agriculture</u>
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- Direct questions will be asked to the students. <i>Guided practice followed by Independent Practice</i>- NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Student –teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table,compare- contrast matrix), silent/ loud reading, collaborative learning, Research work/surveys
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.
Self Study, Home Work, Assignments	Independent Practice: Questions from NCERT
Assessments	Assessment of skit presented by various groups on the basis of content, communication, collaboration, time management and message given by each group to sensitize others.
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> - Encouragement for referring other resources <i>For weak students:</i> - Buddy help to be provided - Provide grade-up classes <i>For differently abled students:</i> - Ignore spelling mistakes.

	• Call parents at regular intervals • Provide grade-up classes
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Topic	DAY 2 Types of crops
Class Transaction	40 min each)
Pre-requisite for the course	This topic requires Basic knowledge of various types of plants, farming and seasons
Assessment of qualifying knowledge	Facilitator asks the students related to agriculture
Objective	Students will be able to understand the importance of agriculture
Dimensions of learning	D1, 2
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> • The different types of crops on the basis of season <u>SKILLS AND COMPETENCIES</u>- <i>Students would be able to</i> • Identify different types of crops Attitudes and beliefs- <i>Students will be able to</i> Appreciate the importance of agriculture
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- Direct questions will be asked to the students. <i>Guided practice followed by Independent Practice</i>- NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Student –teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table,compare- contrast matrix), silent/ loud reading, collaborative learning, Research work/surveys
Resources	Text Book: NCERT text book for Science. Reference Book

	CBSE Exemplar
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.
Self Study, Home Work, Assignments	Independent Practice: Questions from NCERT book
Assessments	Assessment of skit presented by various groups on the basis of content, communication, collaboration, time management and message given by each group to sensitize others.
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> • Encouragement for referring other resources <i>For weak students:</i> • Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes. • Call parents at regular intervals • Provide grade-up classes

Topic	DAY 3 Agricultural Practices (preparation of soil)
Class Transaction	40 min each)
Pre-requisite for the course	This topic requires Basic knowledge of various types of plants, farming and seasons
Assessment of qualifying knowledge	Facilitator asks the students related to agriculture
Objective	Students will be able to understand the how soil is being prepared and the implements involved in it.
Dimensions of learning	D1, 2 , 3
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> • The importance of preparation of soil <u>SKILLS AND COMPETENCIES</u>- <i>Students would be able to</i> • Identify different implements involved in preparation of soil.

	Attitudes and beliefs- <i>Students will be able to Appreciate the importance of agriculture</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- Direct questions will be asked to the students. <i>Guided practice followed by Independent Practice</i>- NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table, compare-contrast matrix), silent/ loud reading, collaborative learning, Research work/surveys
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.
Self Study, Home Work, Assignments	Independent Practice: Questions from NCERT
Assessments	Assessment of skit presented by various groups on the basis of content, communication, collaboration, time management and message given by each group to sensitize others.
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> • Encouragement for referring other resources <i>For weak students:</i> • Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes. • Call parents at regular intervals • Provide grade-up classes

Topic	DAY 4 Agricultural Practices (Sowing)
Class Transaction	40 min each)
Pre-requisite for the course	This topic requires Basic knowledge of various types of plants, farming and seasons
Assessment of qualifying knowledge	Facilitator asks the students related to agriculture
Objective	Students will be able to understand the process of sowing and the implements involved in it.
Dimensions of leaning	D1, 2, 3,
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> - The importance of sowing of soil <u>SKILLS AND COMPETENCIES</u>- <i>Students would be able to</i> - Identify different implements involved in sowing of soil. Attitudes and beliefs- <i>Students will be able to</i> Appreciate the importance of agriculture
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- Direct questions will be asked to the students. <i>Guided practice followed by Independent Practice</i>- NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table, compare-contrast matrix), silent/ loud reading, collaborative learning, Research work/surveys
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Closure	Involving students in summarizing by asking them to prepare questions

	based on the topic.
Self Study, Home Work, Assignments	Independent Practice: Questions from NCERT
Assessments	Assessment of skit presented by various groups on the basis of content, communication, collaboration, time management and message given by each group to sensitize others.
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> • Encouragement for referring other resources <i>For weak students</i> • Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes. • Call parents at regular intervals • Provide grade-up classes

Topic	DAY 5 Agricultural Practices (adding manures and fertilizers)
Class Transaction	40 min each)
Pre-requisite for the course	This topic requires Basic knowledge of various types of plants, farming and seasons
Assessment of qualifying knowledge	Facilitator asks the students related to agriculture
Objective	Students will be able to understand the importance of manures and fertilizers
Dimensions of learning	D1, 2, 3,
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> • The importance of adding manures and fertilizers to the soil <u>SKILLS AND COMPETENCIES</u>- <i>Students would be able to</i> • Identify different manures and fertilizers. Attitudes and beliefs- <i>Students will be able to</i> Appreciate the importance of agriculture

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- Direct questions will be asked to the students. <i>Guided practice followed by Independent Practice</i>- NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table,compare- contrast matrix), silent/ loud reading, collaborative learning, Research work/surveys
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.
Self Study, Home Work, Assignments	Independent Practice: Questions from NCERT
Assessments	Assessment of skit presented by various groups on the basis of content, communication, collaboration, time management and message given by each group to sensitize others.
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> • Encouragement for referring other resources <i>For weak students:</i> • Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes. • Call parents at regular intervals • Provide grade-up classes

Topic	DAY 6 Agricultural Practices (Irrigation)
Class	40 min each)

Transaction	
Pre-requisite for the course	This topic requires Basic knowledge of various types of plants, farming and seasons
Assessment of qualifying knowledge	Facilitator asks the students related to agriculture
Objective	Students will be able to understand the importance of irrigation and various methods of irrigation.
Dimensions of leaning	D1, 2, 3,
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> • The importance of irrigating to the soil <u>SKILLS AND COMPETENCIES</u>- <i>Students would be able to</i> • Identify different methods of irrigation Attitudes and beliefs- <i>Students will be able to</i> <u>Appreciate the importance of agriculture</u>
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- Direct questions will be asked to the students. <i>Guided practice followed by Independent Practice</i>- NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table,compare- contrast matrix), silent/ loud reading, collaborative learning, Research work/surveys
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.
Self Study, Home Work, Assignments	Independent Practice: Questions from NCERT

Assessments	Assessment of skit presented by various groups on the basis of content, communication, collaboration, time management and message given by each group to sensitize others.
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> • Encouragement for referring other resources <i>For weak students:</i> • Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes. • Call parents at regular intervals • Provide grade-up classes

Topic	DAY 7 Agricultural Practices (Protection from weeds)
Class Transaction	40 min each)
Pre-requisite for the course	This topic requires Basic knowledge of various types of plants, farming and seasons
Assessment of qualifying knowledge	Facilitator asks the students related to agriculture
Objective	Students will be able to understand the importance of protection from weeds
Dimensions of leaning	D1, 2, 3,
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> • The importance of protection from weeds <u>SKILLS AND COMPETENCIES</u>- <i>Students would be able to</i> • Identify chemicals used in protection Attitudes and beliefs- <i>Students will be able to</i> <u>Appreciate the importance of agriculture</u>
Transaction Methodology (The teacher can use the	Transaction would proceed in the following manner- Active learning- Direct questions will be asked to the students.

mentioned techniques, wherever applicable, and can use any other too.)	<i>Guided practice followed by Independent Practice-</i> NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table,compare- contrast matrix), silent/ loud reading, collaborative learning, Research work/surveys
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.
Self Study, Home Work, Assignments	Independent Practice: Questions from NCERT
Assessments	Assessment of skit presented by various groups on the basis of content, communication, collaboration, time management and message given by each group to sensitize others.
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> • Encouragement for referring other resources <i>For weak students:</i> • Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes. • Call parents at regular intervals • Provide grade-up classes

Topic	DAY 8 Agricultural Practices (Harvesting)
Class Transaction	40 min each)

Pre-requisite for the course	This topic requires Basic knowledge of various types of plants, farming and seasons
Assessment of qualifying knowledge	Facilitator asks the students related to agriculture
Objective	Students will be able to understand the importance of harvesting
Dimensions of leaning	D1, 2, 3,
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> • The importance of harvesting <u>SKILLS AND COMPETENCIES</u>- <i>Students would be able to</i> • Differentiate between weeding and harvesting Attitudes and beliefs- <i>Students will be able to</i> <u>Appreciate the importance of agriculture</u>
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- Direct questions will be asked to the students. <i>Guided practice followed by Independent Practice</i>- NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table, compare- contrast matrix), silent/ loud reading, collaborative learning, Research work/surveys
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.
Self Study, Home Work, Assignments	Independent Practice: Questions from NCERT
Assessments	Assessment of skit presented by various groups on the basis of content, communication, collaboration, time management and message given by

	each group to sensitize others.
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> • Encouragement for referring other resources <i>For weak students:</i> • Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes. • Call parents at regular intervals • Provide grade-up classes

Topic	DAY 9 Agricultural Practices (Storage)
Class Transaction	40 min each)
Pre-requisite for the course	This topic requires Basic knowledge of various types of plants, farming and seasons
Assessment of qualifying knowledge	Facilitator asks the students related to agriculture
Objective	Students will be able to understand the importance of harvesting
Dimensions of leaning	D1, 2, 3,
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> • The importance of storage <u>SKILLS AND COMPETENCIES</u>- <i>Students would be able to</i> • Identify various methods of storage. Attitudes and beliefs- <i>Students will be able to</i> Appreciate the importance of agriculture
Transaction Methodology (The teacher can use the mentioned techniques,	Transaction would proceed in the following manner- Active learning- Direct questions will be asked to the students. <i>Guided practice followed by Independent Practice</i>- NCERT questions to be discussed in the classroom.

wherever applicable, and can use any other too.)	Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table,compare- contrast matrix), silent/ loud reading, collaborative learning, Research work/surveys
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.
Self Study, Home Work, Assignments	Independent Practice: Questions from NCERT
Assessments	Assessment of skit presented by various groups on the basis of content, communication, collaboration, time management and message given by each group to sensitize others.
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> • Encouragement for referring other resources <i>For weak students:</i> • Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes. • Call parents at regular intervals • Provide grade-up classes