

Section A. (Basic Description of the Chapter)

Name of The School	Govt. Model School, Bhagsar Adarsh Model School, Baler Khurd
Name of The Teacher	NavroopKaur , AnnuPathania
Class	8th
Subject	Science
Name of The Chapter	Crops, production and management
No. of Periods Required To Teach The Chapter	8

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Govt. Middle School Kherimania

District Patiala.

Section B. Objectives / Expected learning outcomes

B.1 Usefulness in daily life

Students will learn:

- Preparation of the soil for a suitable crop.
- Crops and their types according to seasonal changes.
- Various types of activities farmers do for cultivation of crop and agricultural implements used for it.
- Sequence wise agricultural practices.
- Structure and working of plough, hoe, cultivator, leveler, a seed drill etc.
- Importance of irrigation and about the sources of irrigation.
- They will learn about the effective use of weedicide, pesticides and insecticides.
- Crops improvement, crops rotation and organic farming.
- Safe Storage of grains.
- Type of food products obtained from animals.

B.2 Without learning this concept they will not understand:

- Why preparation of soil is necessary before growing a crop?
- Why does the loosening of soil allow the roots to breathe easily?
- Which type of seeds are selected for sowing and why?
- Working and purpose of seed drill
- Manure, fertilizer and their comparison
- Modern methods of irrigation
- Weeds and weedicides
- Harvesting, Threshing, Winnowing
- Animal husbandry

This knowledge is helpful for farmers growing crops according to seasons, agriculture purpose, nutrients present in manure and fertilizers, How to save water by using modern techniques of irrigation, granaries, animal husbandry (poultry farm, fishing farm, aquarium, dairy animals)

B.3 LIFE SKILLS:

The following life skills can be inculcated through the teaching of this chapter in the class:

- How to relate our daily activities with this lesson.
- Students will be able to understand about crops with varying seasons.
- They will be able to understand about the various practices a farmer does in his field.
- They will get awareness about the types of nutrients (either manure or fertilizer) required for the field.
- About the weedicides to remove weeds from the crops
- They will learn about the effective use of weedicide, pesticides and insecticides.
- Skills of Crops improvement, crops rotation and organic farming.
- Skills of Safe Storage of grains.
- Type of food products obtained from animals.
- Team spirit (skill of working in a group)
- Presentation skills and public speaking
- Analytical and research skill
- Creative writing on crop production and its management

B.4 Vocabulary

Vocabulary to which the students would be exposed:

S. No.	Word	Meaning
1.	Crop	Produce of cultivated plants
2.	Fertilizer	Inorganic chemical substances that are enriching the soil with nutrients.
3.	Irrigation	Timely watering the crops
4.	Plough	An implement used for turning up the soil
5.	Manure	Decomposed matter (manure is rich in organic nutrients)
6.	Silo/Granary	Storage house
7.	Sowing	Putting seeds in soil
8.	Threshing	Removal of grain from the harvested crop.
9.	Weed	A weed is an unwanted and uncultivated plant in a field.
10.	Winnowing	To separate chaff from grain using air
11.	Harvesting	Cutting of fully prepared crops
12.	Storage	Safe packaging and keeping the dried food in the warehouses.
13.	Moisture (in the food grains)	Water contents in the food grains.
14.	Pesticide	Chemical substance used for killing harmful pests from the crop.
15.	Insecticide	Chemical substance used for killing harmful insects from the crop.
16.	Weedicide	Chemical substance used for destroying unwanted plants growth in the crop.

Section C: Building Bridges

Prerequisite for learning new concepts in the chapter:

1. Why living organisms need food?
2. How green plants prepare their own food?
3. Do animals make their own food?
4. From where do we get food?
5. How can we provide adequate food to a large population of our country?
6. How can we protect crops?
7. Name the food products we get from animals.
8. What do you mean by crop preservation and storage?
9. What are soil nutrients?

Section D. Period wise break up for each chapter:

Period	What to be covered
1.	Introduction Of The Chapter Through Some activities, Testing Of Previous Knowledge Through Preliminary Worksheet, Talking To The Students Regarding Various Crops Grown At That Time, Different Types Of Crops Like Cereals, Vegetables And Fruits, Crop seasons.
2.	Introduction Of Agricultural Practices Which Includes Preparation Of Soil, Sowing, Manures And Fertilizers, Irrigation, Weeds, Harvesting, Threshing and Storage,
3.	Preparation Of Soil, Agricultural Implements Like Plough, Hoe, Cultivator, Leveler, A Seed drill, Sprinkler, Sickle, Thresher and Combine Machine. Visit to a field.
4.	Sowing, Use of Manures And Fertilizers, Their Comparison
5.	Irrigation, Its Sources, Traditional And Modern Methods Of Irrigation (Sprinkler And Drip) irrigation techniques.
6.	Weeds , Weedicide, Harvesting , Threshing, Winnowing etc.
7.	Crop protection and preservation, Storage ,Food From Animals, Animal Husbandry
8.	Visit To a Granary

Section E. Micro planning of the periods or minute to minute breakup of periods

Sub Section E.1 minute to minute breaks up of period 1

Entry Behavior Of Teacher	10 Min	Students will attempt Preliminary Worksheet 1 (refer Annexure GA1) aimed at previous knowledge testing. The teacher will bridge the gap in understanding through discussion.	Students May Or May Not Able To Respond.
Introduction To Topic	15 Min	<ul style="list-style-type: none"> Teacher will introduce the chapter by discussing how can we make food available for the large population. Define crop. Different types of crops like cereals, vegetables, fruits and cash crops. About changing climatic conditions from one region to another. Classification of crops according to season. Time period during which kharif and rabi crops are grown. 	Teacher Will Use The Blackboard
Careers Options	5 Min	Teachers should tell the students about various career options viz. horticulture, forestry, farming, poultry, etc.	Pictures and charts of career options should be shown to the students.
To Explore Writing And Thinking	5 Min	Teacher will ask the students to give examples of cereals, vegetables, fruits and the cash crops.	
Q & A Session	5 Min.	<p>Relevant questions will be asked during/ after the lecture</p> <p>What is crop?</p> <p>On what basis we have classified the crops?</p> <p>In winter which type of crops are grown?</p> <p>Give examples of kharif and rabi</p>	

		crop?	
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Sub Section E.2 minute to minute breaks up of period 2

Entry Behavior Of Teacher	5 Min	Testing / re-teaching previous knowledge (refer annexure GA2)	
Introduction To Topic	10 Min	The topic will be introduced Through oral test of questions	
Introduction Of Steps Of Agricultural Practices	15 Min	<p>Students will recognize various practices used in agriculture by observing pictures.</p> <p>Teacher will explain all agricultural practices with the help of pictures.</p> <p>Reading and discussion of the content/ concepts mentioned will be done in the class.</p> <p>Discussion of key terminology as given by teacher.</p>	
Home Task	5 Min	Learn key terminology (refer annexure GA3)	
Q & A Session	5 Min.	<p>Relevant questions will be asked during/ after the lecture</p> <p>1) What is the first step of agricultural practices?</p> <p>2) Name the second step of agricultural practices</p> <p>3) Name the step next to sowing 4) What comes after irrigation?</p> <p>5) What we call for cutting of crop after it is mature?</p> <p>6) What do you mean by weedicide?</p> <p>7) What is threshing?</p>	

Entry Behavior Of Teacher	5 Min	Testing / re-teaching previous knowledge of steps of agricultural practices.	
Teaching of the topics on Preparation Of Soil, Agricultural Implements Like Plough ,Hoe	20 Min	<p>*Reading and discussion of the content/ concepts mentioned will be done in the class.</p> <p>*The teacher will show the process of ploughing using soil tray and fork by involving students. Refer Annexure</p>	Pictures/charts of Soil, Agricultural Implements Like Plough ,Hoe Cultivator, Leveler, A Seed

Sub Section E.3 minute to minute breaks up of period 3

Cultivator, Leveler, A Seed drill, Sprinkler, Sickle, Thresher and Combine Machine	5 Min	GA5. Teacher will explain about structure and working of plough. Testing / re-teaching previous knowledge of preparation of soil, agricultural implements (wooden plough). What has replaced indigenous wooden plough?	drill, Sprinkler, Sickle, Thresher and Combine Machine should be shown to the students
		Explanation of Hoe Cultivator, Leveler, A Seed drill, Sprinkler, Sickle, Thresher and Combine Machine Now a day's what is used for ploughing? About the use of cultivator which saves labor and time	
Problem Solving	10 Min	The students will then be asked to perform plough activity by using soil tray, fork.	
Home Task	2 Min	Students will discuss about agricultural implements with their parents.	
Q & A Session	3 Min.	What is the need of preparation of soil? Why does loosening of soil allow the roots to breathe easily? What does the soil contains? Explain about plough and how it is made up of. What is the purpose of hoe? Who drive cultivator while ploughing Explain the functions of Cultivator, Leveler, Seed drill, Sprinkler, Sickle, Thresher and Combine Machine.	

Sub Section E.4 minute to minute breaks up of period 4

Teaching of the topics on Sowing, Manure And Fertilizers, Effects of excessive use of chemical fertilizers on the quality of soil.	18 Min	<ul style="list-style-type: none"> • Most important part of crop production is sowing. • Farmer prefers which type of seeds. • Selection of seeds. • Traditional tool used for sowing. • Advantage of using seed drill. • About manure and how it is obtained. • About fertilizers and their example. • How manure is different from fertilizer? • Effects of excessive use of chemical fertilizers on the quality of soil. 	
Problem Solving	10 Min	The studentssould belistened carefully. Discuss their problems and solve them.	
Home Task	2 Min	Students are asked to grow seedlings in 3 pots using manure, urea and without anything.	The students will do it individually
Q & A Session	5 Min.	1) What is the most important part of crop production? 2) Why farmers prefer healthy seeds? 3) What type of machinesare used for sowing nowadays? 4)Compare manure and fertilizers 5) Is manureprovides all type of nutrients to the soil? 6) What are theeffects of excessive use of chemical fertilizers on the quality of soil?	

Sub Section E.5 minute to minute breaks up of period 5

Entry Behavior Of Teacher	5 Min	Testing / re-teaching previous knowledge of terms used like, sowing, manure and fertilizers.	
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Teaching of the topics on Irrigation, Its Sources, Traditional And Modern Methods Of Irrigation.	15 Min	<p>*What is required for proper growth and development of flowers, fruits and seeds of plants?</p> <p>*Why the water is essential for germination of seeds?</p> <p>*In the summer season the frequency of watering the crops is higher, why it is so?</p> <p>*Sources of irrigation</p> <p>*Traditional methods of irrigation by using moat, chain pump, dhekli, rahat.</p> <p>*Modern methods of irrigation- sprinkler and drip irrigation.</p>	
Revision	15 Min	The chapter will be revised by showing pictures of various methods of irrigation.	
Home Task	2 Min	Make model of drip irrigation and sprinkler.	
Q & A Session	3 Min.	1) What is irrigation? 2) What is used in traditional method of irrigation? 3) Why traditional methods are less successful? 4) Sprinkler method of irrigation is used in which type of land? 5) Which method of irrigation is used where availability of water is less?	

Sub Section E.6 minute to minute breaks up of period 6

Entry Behavior Of Teacher	5 Min	Check previous knowledge of irrigation and methods of irrigation.	
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Teaching of the topics on Weeds, Pests, Insects, Weedicide, Pesticides, Insecticides, Harvesting Threshing, Winnowing.	25 Min	<ul style="list-style-type: none"> * Have you seen some other plants together with wheat plants in the field? * About weeds * Why weeding is necessary? * Ways to remove weeds * About weedicides * About insects and insecticides. * About pests and pesticides. * Effects of weedicides, insecticides and pesticides on the ecosystem. * Harvesting and how it is done? * How seeds are separated from chaff? * Discussion of winnowing process and machine used for it. 	
Home Task	5 Min	<p>Paste pictures of harvesting, threshing and winnowing in scrap book.</p> <p>Make a chart on insects, pests and weeds.</p> <p>Tabulate weedicides, pesticides and insecticides.</p>	
Q & A Session	5 Min.	<p>Q. Do weedicide have any effect on the person handling weedicide sprayer?</p> <p>Q. Name weedicides, pesticides and insecticides.</p> <p>Q. what does the farmers do with stubble left in the field after harvesting?</p> <p>Q. What are the special festivals associated with harvesting season?</p>	

Sub Section E.7 minute to minute breaks up of period 7

Entry Behavior Of Teacher	4 Min	Check previous knowledge of weeds, weedicide, harvesting, threshing, and winnowing.	
Topics on Crop protection, preservation, Storage, Food From Animals, Animal Husbandry to be covered	30 Min	<ul style="list-style-type: none"> *How can we keep grains for longer time? *Freshly harvested seeds are dried *About silos and granaries *Natural ways to store food grains *Crop protection and preservation. *Chemical treatment to protect from pests *Type of food from animals. *Animal husbandry. 	Pictures/charts related to the topics should be shown to the students.
Home Task	2 Min	To ask parents about natural ways to store grains	
Q & A Session	4 Min.	<p>Q. what is storage?</p> <p>Q. How can we keep crop grains for longer time?</p> <p>Q. How crop grain is kept for longer time?</p> <p>Q. How freshly harvested grains are stored?</p> <p>Q. How large scale storage is done?</p> <p>Q. What is animal husbandry?</p>	

Sub Section E.8 minute to minute breaks up of period 8

Entry Behavior Of Teacher	4 Min	Check previous knowledge of storage, food from animals, animal husbandry.	
Visit To Granaries	35 Min	Students will visit granary store with teachers. They will see grains in jute bags or metallic bins. Large scale storage of grains is done in silos and granaries to protect them from pests like rats and insects.	
Home Task	1Min	Do write up in worksheets	

Summary/ Importance

All living organisms require food. In order to provide food to large number of population; regular production, proper management and distribution of food is necessary.

When plants of the same kind are grown and cultivated at one place on a large scale, it is called a crop. On seasonal basis it is categorized as kharif and rabi crops. **Kharif** season crops are summer season crops. Sowing is done in June to July and the crops are harvested during September or October. **Examples:** Rice, maize, groundnut, jowar, pulses and cotton. **Rabi** season crops are winter season crops. Sowing is done in October to November and the crops are harvested during March or April. **Examples:** Wheat, barley, gram, potato and mustard.


The steps of agricultural practices:

- 1) **PREPARATION OF SOIL:** It is used to loosening and turning of soil to provide aeration to the soil and help in the penetration of roots deep into the soil
- 2) **SOWING:** Good quality seeds are required. Seeds should be placed at proper distance to avoid overcrowding of plants
- 3) **MANURE AND FERTILISERS:** These substances are added to provide nutrients for the healthy growth of crop plants. Manure is an organic substance and fertilizers are the inorganic salts prepared in factories
- 4) **IRRIGATION:** The supply of water to the plants at different intervals is called irrigation. It can also be done by sprinklers and drip system to avoid the wastage of water.
- 5) **PROTECTION FROM WEEDS:** The undesirable plants in the crop are called weeds. It can be removed manually by using khurpi or using certain chemicals called weedicides like 2, 4-D and Metachlor.
- 6) **PROTECTION FROM PESTS:** The organisms which damage or harm the crop are called pests. The common pests are insects, rats, mites, birds and disease causing organisms like bacteria, fungi and viruses. Common pesticides are Malathion, BHC, DDT and EDT.
- 7) **HARVESTING:** The cutting of crop after it is mature is called harvesting. It is either done manually by sickle or by a machine called harvester.
- 8) **STORAGE:** Storage of grain is an important task. If freshly harvested grains are stored without drying, they may get spoilt or attacked by organisms, losing their germination capacity. Food is also obtained from animals for which animals are reared.
- 9) **CROP PRESERVATION:** The objective of crop preservation is to retain crop quality during post-harvest storage. Drying, Canning and Freezing are some of the methods of preservation.

Section G. Listing of Possible Activities

Name Of The Concept/ Skill / Outcome	Name of the possible activities	Reference of the annexure where the details of the activity have been given in the already specified format or reference to the web address
A. Recap Of The Pre Requisite Knowledge	1.Preliminary Worksheet	Annexure GA1
B. Introduction Of Crop And Agricultural Practices	1. Oral test	Annexure GA2
C. Preparation Of Soil, Agricultural Implements	1.Key Terminology Chart	Annexure GA3
	2.Ploughing activity	Annexure GA4
D. Irrigation, Traditional And Modern Method Of Irrigation.	Model making	Annexure GA5
E. Weeds, Weedicide, Harvesting, Threshing, Winnowing	Pasting pictures	Annexure GA6
F. Write Up	write up on the visit	Annexure GA7

Annexures


Annexure Name	GA1
Name of the activity	PK Worksheet
Specify the topic and its convergence (inter discipline)	PLANTS
Type of the activity (individual activity/ group activity / home activity etc.)	Individual
Material required for the activity	Worksheet
Any specific preparations required in the class room for performing the activity	
Details of the activity and detailed instructions to carry it out	1 .Why living organisms need food? 2. How green plants make their own food? 3. Do animals make their own food? 4. From where do we get food? 5. How can we provide food to a large number of people in our country?
Pictures describing the activity, if any	
Any precautions to be kept in mind	
Explanation of the outcomes of the activity	Students will understand about assessment of pre-requisite knowledge

Annexure Name	GA2
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Name of the activity	Questions (Oral) of crops																								
Specify the topic and its convergence (inter discipline)	Oral questions to check student understanding																								
Type of the activity (individual activity/ group activity / home activity etc.)	Individual																								
Material required for the activity																									
Any specific preparations required in the class room for performing the activity																									
Details of the activity and detailed instructions to carry it out	Students to be asked following questions according to the concepts covered day wise: 1) What is crop? 2) Give examples of cereal crops 3) Give examples of vegetable crops 4) Give examples of fruit crops 5) On what basis we have classified the crops? 6) Give examples of kharif and rabi crop																								
Pictures describing the activity, if any	<div><div>Monsoon raises foodgrain hopes*</div><div>Higher kharif acreage</div><table><thead><tr><th>Crop</th><th>This Year</th><th>Last year</th></tr></thead><tbody><tr><td>Rice</td><td>354.61</td><td>344.72</td></tr><tr><td>Pulses</td><td>101.81</td><td>88.31</td></tr><tr><td>Coarse cereals</td><td>190.55</td><td>168.13</td></tr><tr><td>Oilseeds</td><td>188.16</td><td>167.13</td></tr><tr><td>Sugarcane</td><td>48.74</td><td>50.06</td></tr><tr><td>Cotton</td><td>111.65</td><td>112.83</td></tr><tr><td>Jute & mesta</td><td>8.31</td><td>8.45</td></tr></tbody></table><div><div>* In lakh hectares as on Aug 30</div><div>Source: Ministry of Agriculture</div></div><div></div></div>	Crop	This Year	Last year	Rice	354.61	344.72	Pulses	101.81	88.31	Coarse cereals	190.55	168.13	Oilseeds	188.16	167.13	Sugarcane	48.74	50.06	Cotton	111.65	112.83	Jute & mesta	8.31	8.45
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Any precautions to be kept in mind																									
Explanation of the outcomes of the activity	To check student understanding of topics covered in the chapter																								

Annexure Name	GA3
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Name of the activity	Key Terminology
Specify the topic and its convergence (inter discipline)	
Type of the activity (individual activity/ group activity / home activity etc.)	Individual
Material required for the activity	Pen, Paper
Any specific preparations required in the class room for performing the activity	
Details of the activity and detailed instructions to carry it out	<p>CROP: same kind of plants grown and cultivated at a place</p> <p>KHARIF CROP: crops grown in rainy season.</p> <p>RABI CROPS: crops grown in winter season.</p> <p>Agricultural practices:the processeswhich are involved in production of crops.</p> <p>PLOUGHING: Process of loosening and turning the soil.</p>
Pictures describing the activity, if any	
Any precautions to be kept in mind	
Explanation of the outcomes of the activity	To acquaint the students with the key terminology

Annexure Name	GA4
Name of the activity	PLOUGHING ACTIVITY
Specify the topic and its convergence (inter discipline)	Preparation of the field and its levelling for growing a crop.
Type of the activity (individual activity/ group activity / home activity etc.)	Group
Material required for the activity	Soil tray, fork
Any specific preparations required in the class room for performing the activity	Make group of 5 students and perform this activity
Details of the activity and detailed instructions to carry it out	Discussion of ploughing, its purpose and implement used.
Pictures describing the activity, if any	
Any precautions to be kept in mind	Agricultural Implements needs proper precautions while their handling.
Explanation of the outcomes of the activity	Teamwork, collaboration, leadership quality, critical thinking

Annexure Name	GA5
Name of the activity	Model making
Specify the topic and its convergence (inter discipline)	Drip and sprinkler system of irrigation(Preservation of water-table).
Type of the activity (individual activity/ group activity / home activity etc.)	Group
Material required for the activity	Wooden Board/Thermocol, Colors, pipes, nozzles ,tapes, small plants, etc.
Any specific preparations required in the class room for performing the activity	
Details of the activity and detailed instructions to carry it out	Students will be shown model of irrigation and its working
Pictures describing the activity, if any	
Any precautions to be kept in mind	Wastage of water and its spillage to be avoided.
Explanation of the outcomes of the activity	To acquaint the students with the modern system of irrigation.
Objective assessment of the learning	Necessity of irrigation.

Annexure Name	GA6
Name of the activity	PASTE PICTURES
Specify the topic and its convergence (inter discipline)	HARVESTING: THRESHING,WINNOWING
Type of the activity (individual activity/ group activity / home activity etc.)	Individual
Material required for the activity	Scrap book, colors, gum, pictures, scissors, etc.
Any specific preparations required in the class room for performing the activity	
Details of the activity and detailed instructions to carry it out	Individually students are asked to paste the pictures of sickle, combines, winnowing machines
Pictures describing the activity, if any	  
Any precautions to be kept in mind	
Explanation of the outcomes of the activity	The exercise will help them develop understand about the use of various machines. It will help them develop critical thinking and decision making.

Annexure Name	GA7
Name of the activity	WRITE UP ON THE VISIT
Specify the topic and its convergence (inter discipline)	GRANARY
Type of the activity (individual activity/ group activity / home activity etc.)	Individual
Material required for the activity	Pen, sheets
Any specific preparations required in the class room for performing the activity	
Details of the activity and detailed instructions to carry it out	Teacher will explain about silos and granaries during the visit.
Pictures describing the activity, if any	
Any precautions to be kept in mind	
Explanation of the outcomes of the activity	To enable the students to build up their writing and presentation skills.
Objective assessment of the learning	

H. ASSESSMENT TOOL FOR STUDENTS:-

1. What is a crop?
2. Give examples of Kharif and Rabi crops.
3. Define weedicides and give their example.
4. Name the traditional methods of irrigation.
5. What is the purpose of seed drill?
6. Describe the drip system of irrigation.
7. Give the basis of selection of animals for animal husbandry.
8. What are the conditions required in the silos and granaries?
9. What are the advantages of manures over fertilizers?
10. Why does the loosening of soil allow the roots to breathe easily?
11. What are the uses of ploughing the soil?
12. What are the uses of levelling the soil?
13. Describe organic and inorganic manure.
14. Name some of the chemical fertilizers used in the crops.
15. Name some of the weeds.
16. Name the agricultural instrument used to remove weeds.
17. Suggest some methods for the weeds free crop.
18. How can we improve the water-table?
19. How can we protect our crops from pests?
20. Name some of the pests.
21. Name some of the pesticides.
22. What do you understand by the harvesting?
23. Name different methods of harvesting.
24. Enlist the factors for crop improvement.
25. What do you mean by food from animals?
26. What is cattle management?
27. Define the terms, poultry, fishery, Dairying and Apiculture separately.
28. What are Apiaries?
29. What is organic farming?
30. What are the advantages of crop rotation?
31. How legume plants increase fertility of soil?

32. What are the advantages and disadvantages of organic farming?
33. Illustrate the harmful effects of excessive use of fertilizers, pesticides, insecticides etc. on the quality of soil.
34. What are cash crops?
35. Enlist the factors which have led to Green Revolution.
36. Why living organisms need food?
37. How green plants prepare their own food?
38. Do animals make their own food?
39. How can we provide adequate food to a large population of our country?
40. How can we protect crops?
41. Name the food products we get from animals.
42. What do you mean by crop preservation and storage?
43. What are soil nutrients?

I. ASSESSMENT TOOL FOR TEACHERS:-

1. Define a crop?
- 2 Name the different agricultural tasks.
3. Define the terms Agriculture and Horticulture.
4. Give examples of Kharif and Rabi crops.
5. What are weedicides give some example.
6. Name the traditional methods of irrigation.
7. What is the purpose of seed drill?
8. Describe the drip system of irrigation.
9. What is waterlogging?
10. What is the basis of selection of animals for animal husbandry?
11. What conditions are required in the silos and granaries?
12. What are the advantages of manures over fertilizers?
13. What are Green manures?
14. Why does the loosening of soil allow the roots to breathe easily?
15. What are the uses of ploughing the soil?
16. What are the uses of levelling the soil?
17. Describe organic manure?
18. Name some of the chemical fertilizers used in the crops.
19. Name some of the weeds.
20. Name the agricultural implements used to remove weeds.
21. Suggest some methods for the weeds free crop.
22. Why should we remove weeds from the fields?
23. How do we can improve the water-table?
24. How do we can protect our crops from pests?
25. Name some of the pests.
26. Name some of the pesticides.
27. What do you understand by harvesting?
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38. Illustrate the harmful effects of excessive use of fertilizers, pesticides, insecticides etc. on the quality of soil.
39. What are cash crops?
40. Give some examples of cash crops.
41. Enlist the factors which have led to Green Revolution.
42. What do you mean by crop rotation?
43. What is plant breeding?
44. Name the methods of crop preservation.
45. What is canning?
46. Why Horticulture produce are kept at low temperature (0°C to 1°C)?
47. What is the limit of moisture contents for safe storage of cereal grains?
48. What is multiple cropping?
49. Define Biological control.
50. Define crop yield.
51. What is an Orchard?