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Ministry of Education

General Directorate of Vocational Education

English
For Schools of Agriculture
Book 2

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

IN THE NAME OF ALLAH,

MOST GRACIOUS,

MOST MERCIFUL.

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English for Schools of Agriculture

Book 2

Introduction

Aim:

The general aim of this course is to develop learners' language skills; listening, speaking, reading and writing. It supplements what they have learnt in the previous years with more specification in conformity with the other subject matters in the curriculum, and to enable them to use the English language communicatively in the future.

Objectives:

By the end of the three-book series, learners are supposed to:

1. develop knowledge of the basic elements of English language: vocabulary, pronunciation and grammar,
2. develop understanding of oral and written language skills,
3. be aware of the specific vocabulary and expressions relevant to their study; i.e. seeds, parts of a plant, soil, animal products, forests, etc,
4. develop aesthetic and cultural creative sense in order to appreciate ESP topics and literature,
5. participate in everyday-life communicative dialogues, discussions and interactions,
6. Understand instructions and read manuals, booklets and magazines in the field of agriculture,
7. Develop receptive skills, i.e. listening and reading, by practicing certain activities in this respect,
8. Promote productive skills, i.e. speaking and writing, by fulfilling meaningful and authentic activities,

9. be capable of using specific language in their future career,
10. Practice language learning skills such as speed reading skills, i.e. scanning, guessing, etc,
11. practice language learning autonomy strategies such as note-taking, summarizing, etc,
12. become active participants and language users, and
13. Involve into co-operative learning.

Syllabus Design

Each book of the series has the following activities format: vocabulary, speaking, reading, pronunciation, grammar and writing. This is to ensure its communicative purposes within the activity sequence and to motivate learners to participate effectively. Listening is achieved indirectly by exposing learners to the model, i.e. the teacher.

Language Activities

a- Vocabulary

New words are introduced at the beginning of the units in a form of activities so as to be familiar to learners when these words appear again in the reading text. Teachers are supposed to encourage students to work out the activities as a warm up.

b- Speaking

There are speaking activities in every unit of this course. They include dialogues which will equip students with the basic expressions needed to cope

with everyday conversations in English concerning their field of study and future career. This activity will give them both practice and confidence in using what they learn.

c- Reading Comprehension

Each unit has one main reading text preceded by lead inquestions and activities to give students reason to read and to predict what they will be reading about in the text. At the same time, it is a kind of brainstorming to what they already know about the world (prior knowledge) or about English. The reading texts are supplemented with various activities to help students discover and learn new vocabulary and expressions.

d- Pronunciation

This activity provides practice in English pronunciation with sufficient illustrations. The presentation of the English sound system needs to be enriched by other examples and/or activities on the part of the teacher and the learners as well.

e- Grammar

The main grammatical points are almost given according to their occurrence in the reading passages. It contains activities which promote practicing the main structure item. It is also reviewed in the **Revision** units for reinforcement and ease in using them again.

f- Green Fingers

This activity introduces some tips of advice regarding agricultural topics to promote memorization.

G-Writing

Writing is promoted by exposing learners to activities that include practicing certain writing skills and sub-skills. Sometimes if activities are new, instructions are presented to the learners where they are required to follow them step by step.

Revision Units

Revision is crucial in language learning. There are two revision units. Each one is situated after every three units. Language and structures are recycled throughout various activities in order to help students reinforce what they have previously learned, especially new items and vocabulary.

Working in Pairs or Small Groups:

The learner is the core of the learning process. It means he/she must have an active role whether individually or in pair/group work.

The activities are either oral or written. The oral ones are done in pairs, groups, or whole class participation, and even assigned by the teacher to be practiced at home. As for the written activities, they are done by learners at school or home for reinforcement and practice. In pair or group activities, the teacher should make sure that the students do understand the aims of the activity.

Pair or group work is not easy to organize in every class, and there may be a noise problem to deal with. However, it is worth trying occasionally. Working in pairs or groups encourages students to share ideas, practice and help each other, to broaden their communicative skills.

Teachers monitor the class in order to:

- aid the flow of conversation when necessary,
- identify any common errors or areas of breakdown,
- offer encouragement, and
- recognize when best to change the pairs or the groups.

Assessment Procedures

1. Oral Assessment

As officially recommended, **30** marks are dedicated for oral assessment. These marks are to be distributed according to the activities shown in the table below:

Activity	Mark
Reading	10
Comprehension Questions	5
Pronunciation	5
Topic Discussion	5
Vocabulary	5

2. Written Assessment

The rest **70** marks go to assess learners' achievement in the written test which includes every feature described in this prescribed textbook.

Activity	Mark
Reading Comprehension	10
Grammar	10
Pronunciation	10
Vocabulary	10
Language Functions	10
Writing	10
Testing Oral Activities Through Written Exams	10

UNIT ONE

Bee Keeping



Vocabulary

1.1 Use the suitable words from the list below to fill in the following blanks.

{hive bees buzzing drone flower honey
insects nectar sting
stripes swarm sweet workers }

1. Thebee lays eggs.
2. Bees live together in a
3. Beeguard the hive.
4. Bees are hard-working
5. The worker bees fly from flower to gathering nectar.
6. Bees make honey from
7. Female bees have a defensive

Speaking

1.2 Share the following conversation with your classmate.

On the Road: Asking for Directions

Driver: Excuse me, is Al-Nidhal Street near here?

Police: Al-Nidhal Street? That's near the petrol station, isn't it?

Driver: I don't know...

Police: Yes, I'm sure of it. But you're going the wrong way.

Driver: So I need to turn round and go back down this road, do I?

Police: No, wait. Just go up to the lights and turn left ...

Driver: What? These traffic lights, you mean?

Police: Yes. Left at the lights, then left again at the first crossroads.

Driver: And will that be Al-Nidhal Street?

Police: That's the High Street. If you go straight down there, past all the shops, you'll come to the station. Go under the bridge, and

Al-NidhalStreet is the first turning on the right.

Driver: So, it's left, left again, past the shops, under the bridge, and first on the right. Thank you so much.

Police: Good luck. Drive safely.

Reading

1.3 Bees



Bees are dependent on pollen as a protein source and on flower nectar or oils as an energy source. Adult females collect pollen primarily to feed their larvae. The pollen they inevitably lose in going from flower to flower is important to plants because some pollen lands on the pistils (reproductive structures) of other flowers of the same species, resulting in cross-pollination. Bees are, in fact, the most important pollinating insects, and their interdependence with plants makes them an excellent example of the type of symbiosis known as mutualism, an association between unlike organisms that is beneficial to both parties.

Most bees have specialized branched or feathery body hairs that help in the collection of pollen. Female bees have a defensive sting. Some bees produce honey from flower nectar. Honey bees and stingless bees commonly hoard large quantities of honey—a characteristic that is exploited by beekeepers, who harvest the honey for human consumption.

Body Parts of Bees

The body of honeybees is divided into three major parts which are the head, thorax and abdomen.

Head: The head of the bee is dominated by two large compound eyes. There are three small eyes between the compound eyes. The bees' vision is different from that of humans.

Thorax: It is the middle part of the bee body where the legs and the wings are attached. Each pair of legs performs different activities for the bee's grooming and for pollen collection.

Abdomen: It is where the digestive and reproductive organs are located. The sting is located at the end of the abdomen. Being a social insect, a honeybee can fly about 15 miles per hour (mph), collect nectar from flower to flower and bring it back to the hive. The three types of bees with varying duties inside the hive are:

- The queen who lays eggs
- The workers who basically do much of the work like gathering food, tending to eggs, building honeycombs and guarding the hive
- The drones are male bees whose main duty is to mate with the queen.

Bees are hard-working insects. They live together in a nest called a hive. There is one queen bee in each hive. She is the largest bee. There are hundreds of

worker bees. The worker bees fly from flower to flower gathering a sweet liquid called nectar. They make honey from the nectar and store it in little rooms in the hive. Each little room is a cell. Many cells in a row make a honeycomb.

All the bees in the colony probably contribute to the process of changing nectar into honey and in the air conditioning of the colony to maintain a suitable temperature and humidity as follows:

1. Bees under 3 days old clean the cells for the queen to lay in and for food storage.
2. Bees of 3 to 7 days old feed the older larvae.
3. Bees of 7 to 14 days old secrete royal jelly for feeding the queen and they secrete wax for comb building.
4. Bees of 14 to 21 days old forage primarily for pollen.
5. Bees over 21 days old forage for nectar.

The bees have an accurate language based upon characteristic dances, odor, and taste perception. When a foraging bee locates a source of pollen or nectar, she can communicate this information to other bees in the colony accurately as to direction, distance from the hive, and the kind of plants supplying it.

Activities

1.4 Answer the following questions with information taken from the text.

1. What are the body parts of bees?
2. What are the three types of bees?
3. Where do bees live?
4. How do bees make honey?
5. How do bees communicate with each other?

1.5 Match the beginning of sentences in List A with their suitable endings from List B.

List A: Bee Age		List B: Duty	
1.	under 3 days	a	forage for pollen
2.	3 to 7 days	b	feed the older larvae
3.	7 to 14 days	c	forage for nectar
4.	14 to 21 days	d	secrete jelly and wax
5.	over 21 days	e	clean the cells

Pronunciation

1.6 /i:/ , /i/ , /e/

Pronounce the following words and identify the difference in vowel sounds:

heat , *hit* , *head*

Vowels	Found in Letters	Examples	Exceptions
/i:/	e, ee ea ie, ei	be, eve, see, meet, sleep, meal, read, leave, sea, team, field, believe, receive	been/i/; bread, deaf /e/; great, break /ei/; friend /e/
/i/	i y	it, kick, tip, pick, dinner, system, busy, pity, sunny	machine, ski, liter, pizza /i:/
/e/	e ea	let, tell, press, send, end, bread, dead, weather, leather	meter/i:/ sea, mean /i:/

Activity

1.7 Identify the vowel sound in the following words.

sweat, deceive, hint, wheel, achieve, wet , wind

Grammar

1.8 The Past Continuous Tense

Study the following examples:

- Last night at 6 PM, I **was eating** dinner.
- At midnight, we **were** still **driving** through the desert.
- Yesterday at this time, I **was sitting** at my desk at work.

1. The past continuous is used to express something that is happening at a precise moment in the past.

For example: *Jalal was working on the report last night at 10.15.*

2. The past continuous is most often used to express an interrupted action expressed using the past simple.

For example: *Ahmed was talking on the phone when I arrived.*

The following diagram shows the uses of this tense:

tense	Affirmative/Negative/Question	Use	Signal Words
Past Continuous	<p>He was speaking.</p> <p>He was not speaking.</p> <p>Was he speaking?</p>	<ul style="list-style-type: none"> action going on at a certain time in the past actions taking place at the same time action in the past that is interrupted by another action 	<p>when,</p> <p>while,</p> <p>as long as</p>

The Form:

	Positive	Negative	Question
I / he / she / it	I was speaking.	I was not speaking.	Was I speaking?
you / we / they	You were speaking.	You were not speaking.	Were you speaking?

Activity:

1.9 Put the verbs between brackets into the past continuous form.

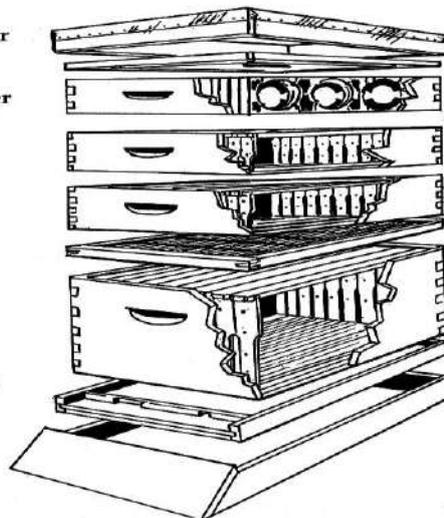
1. I letters all day yesterday. (write)
2. He on the phone for hours and hours. (talk)
3. They much business before lunch. (do:negative)
4. She to me all week. (speak:negative)
5. It for long. (rain: negative)
6. What you when I phoned yesterday? (do)

Green Finger

1.10 How to Install a Beehive:

Look at the following chart and then explain how you can install a beehive

Telescoping Cover
Inner Cover
Ross Round Super
Shallow Super
Medium Super
Queen Excluder
Brood Box
(Full Depth Super)
Entrance Reducer
Bottom Board
Hive Stand



Writing

1.11 Answer the following questions so as to make a paragraph.

1. What are bees?
2. Where do they store nectar?
3. How do they point to the source of nectar?
4. What is a beekeeper?
5. How does a beekeeper make a bee hive?

UNIT TWO

Drainage and Irrigation



Vocabulary

2.1 Complete the following table by adding the suitable suffixes (-age, -ion, -cation, -ment) to the verbs to change them into nouns. You may need to change the spelling.

Verbs	Nouns
drain	
move	
remove	
irrigate	
collect	
apply	
require	

2.2 Match the words in List A with their meanings in List B.

List A	List B
1. ditch	a. supplying land and crops with water
2. excess	b. a system used for draining water
3. crops	c. underground water
4. subterranean water	d. plants that are grow on farms for food
5. drainage	e. too much
6. irrigation	f. a narrow hole that has been dug into the ground

Speaking

2.3 Read the following paragraph and then say the steps of gardening.

My uncle has a beautiful flower and vegetable garden behind our house. Every year in the spring, he prepares the soil by mixing in compost, peat moss, and manure into the ground using a tiller. This helps enrich the soil with vital nutrients so that plants can grow. Next, he usually plants more things from seedlings (small plants) rather than planting seeds because seedlings already have a good start. He usually plants

tomatoes, cucumbers, squash, corn, carrots, peppers, and broccoli. He digs a small hole in the soil, places the seeding in, adds little water, and then covers the roots of the plants with dirt. From time to time, he fertilizes the plants to help them grow. He picks the vegetables and fruit when they're ripe. When the growing season is over, he pulls out the old plants by hand or uses a tiller to plow them under. He adds any dead leaves from the trees to enrich the soil for the coming year.

Reading

2.4 Drainage and Irrigation



One meaning of drainage is the natural ability of soil to allow a downward movement of water. The ease with which water can pass through soil depends on the proportion of coarse and fine particles such as sand and clay. The finer the particles become, the more slowly the water percolates, or passes through the soil. So heavy soils such as clay are more impermeable than light soils.

When there is too much water in the soil, some of it must be drained off, this is the other meaning of drainage: the removal of excess water from the soil by ditching or tiling. This is done in order to maintain a correct balance of air and water in the soil. Good drainage makes soil easier to work. It also helps to increase the feeding area of the soil for the roots of plants. Another advantage is that a well-drained soil will have enough air for aerobic bacteria to break down humus and so provide food for the plants.

Ditching is one of the most important techniques for draining land. Ditches can be cut at certain intervals between the crops. These will remove surface water. They should be wide and straight, with sloping sides, and they should be regularly cleaned. Another important technique is tile drainage. Porous drainage tiles may be laid in or on the land and these will help to draw off the surplus water. The distance between the drains will depend on the level of the land, the permeability of the soil, and the amount of rainfall. For very heavy soils, mole drainage can be used. This technique is used where water accumulates underground. A tunnel is bored about 3 inches in diameter through the earth at a depth of about 2 feet.

Where and when water is short supply, irrigation is needed to make up the deficit. We should distinguish between the collection of water and its application.

There are two main sources of irrigation water: surface water and ground water. The former may be obtained from rivers, lakes or reservoirs and the latter is provided by underground water deposits. Irrigation from rivers is mainly a long canal from dams which have been built across the rivers. The water collects behind the dam during the wet season and it is applied in the fields later during the dry season. Subterranean water is obtained by digging a well. In either case, it is necessary to lift the water before it can be used for irrigation.

The amount of water which is required for irrigation depends on a number of factors. It depends, firstly, on the type of soil, and the deficit in the soil. By this we mean the amount of water which is needed to bring the soil to full capacity. It also depends on the type of stage of growth of the crop and the amount which it will use at that particular time. The irrigation requirement of a crop is not the same throughout its growing period. Most plants require larger quantities of water during the later stages than in the earlier stages. Sugar cane needs heavier irrigation or more frequent irrigation from about the sixth or seventh month onwards. In the same way, grain crops require their maximum irrigation during the time ear heads are forming.

Activities

2.5 State whether each of the following sentences is True or False.

1. Water can pass through a permeable soil more easily than through an impermeable soil?
2. Water percolates through soil more quickly when the soil particles are coarse.
3. Rivers, lakes or reservoirs provide surface water for irrigation.
4. Subterranean water can be used immediately for irrigation.
5. Most plants require larger quantities of water during the later stages than in the earlier stages?
6. If the soil is impermeable tile drains should be laid far apart.

2.6 Read the text again and complete the following sentences.

1. A correct balance of air and water is maintained by
2. For very heavy soils, can be used.
3. A tunnel is
4. The amount of water which is required for irrigation depends firstly on the type of, and the soil
5. Subterranean water is obtained by or
6. Irrigation takes place during

Pronunciation

2.7 /a/ , /a:/ , /ə:/

Pronounce the following words and identify the difference in the vowel sound: (stand /stand/, start /sta:t/, skirt /skə:t/)

Activity:

Vowels	Found in Letters	Examples	Exceptions
/a/	a	cat, clap, land, thank, mad	
/a:/	ar a	arm, car, part, garden, park, father, calm, palm, drama, last, class, dance castle, half	war, warm /o:/
/ə:/	er, ur, ir or, ar ear	serve, herb, burn, hurt, girl, sir work, word heard, earn, earnest, earth	heart, hearth /a:/

Activity

2.8 Identify the vowel sound in the following words:

ask, shirt, sang, aunt, nurse, jam

Grammar

2.9 The Past Perfect Tense

We use the past perfect tense to talk about what happened before a point in the past. It looks back from a point in the past to further in the past.

Examples:

I hadn't known the bad news when I spoke to him.

I checked with the supplier and they still hadn't received the contract.

The company had started the year well, but it was badly hit by the postal strike.

The past perfect tense is often used when we report what people had said/ thought/ believed.

Examples:

He told me they had already paid the bill.

He said he believed that John had moved to Italy.

I thought we had already decided on a name for this product.

The Form:

Subject	had	past participle
We	had	decided...
Affirmative		
She	had	given.
Negative		
We	hadn't	asked.
Interrogative		
Had	they	arrived?
Interrogative negative		
Hadn't	you	finished?

Activity:

2.10 Put the verbs between brackets into the past perfect.

- The storm destroyed the sandcastle that we (build).
- He (not / be) to Cairo before 1997.
- When she went out to play, she (do/already) her homework.
- The doctor took off the plaster that he (put on) six weeks before.
- I could not remember the poem we (learn) the week before.
- The children collected the chestnuts that (fall) from the tree.
- She (not / ride) a horse before that day.
- The garden was dead because it (be) dry all summer.
- The grass was yellow because it (not/rain) all summer.
- She said that she (not/visit) the UK before

Green Fingers

2.11 Read the following poem and then explain its meaning. Share ideas with your classmates.

Farmers

I don' like poetry
Said the husband to the wife..
I've no time for such things
I live a Farmers' life
But the wife said 'dear husband'
'you live a poet's poem'
do you not reap the harvest
of seeds by which you've sown?
I've seen you bow your head in thanks
When God answered prayers for rain
I've seen your eyes shine with pride
With every baby calf you name'
'I guess poetry's okay' he said
As he kissed that farmer's wife
And silently he thanked the Lord
She saw poetry in their life

Writing

2.12 Write a paragraph by answering the following questions.

1. What is drainage.
2. What is the factor which determines the passing of the water through soil?
3. What is the important technique for land draining?
4. Does ditching have any advantages? How?
5. What is meant by the porous drainage tiles?
6. What are the two main sources of irrigation water?
7. How can we obtain subterranean water?

UNIT THREE

Plant Blights

Vocabulary

3.1 Blights affect different plants. Match the blight in the list with the picture that represents it.

pumpkin blight tomato blight
potato blight eggplant blight
pepper blight melon blight



.Potato blight



.....



.....



.....

Speaking

3.2 Share answers to the following questions with your classmate.

1. Mention one reason behind plant blights?
2. What happens to plants when they get infected?
3. Is it possible to protect plants from infection? How?
4. What kind of loss does blight cause? Explain.
5. Do factories and cars have any role in causing plant blight? How?

Reading

3.3 Plant Blights

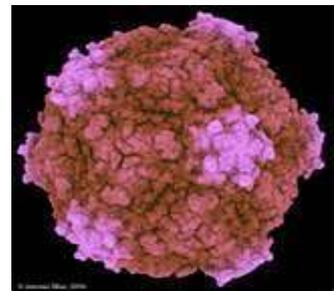
Plant Blights are caused by different agents. The primary types of these agents are fungi, bacteria, viruses and viroids, nematodes, parasitic seed plants, and a variety of noninfectious agents.



Fungus



Bacteria Cells



Tobacco Viruses

Fungi

The fungi that cause plant blight derive their food from the plant (host) and are called parasites. Those that can live and grow only in association with living plant tissues are obligate parasites. Some fungi get their food from dead organic matter and are known as saprobes or saprophytes. Still others can utilize food from either dead organic matter or from living plant cells.

Bacteria

Destructive bacterial diseases affect the major cereal, vegetable, and fruit crops. With a few exceptions, most of the bacteria that cause disease in plants are non-spore-forming, rod-shaped, gram-negative cells. Many foliage pathogens are dependent upon wind-driven splashing rain as the primary means of spread from plant to plant. Bacteria also may spread from plant to plant by insects, in irrigation water, and by various cultural operations during the growing season. Bacteria can also survive in the winter in insects such as flea beetles.

Viruses and Viroids

The essential element of each of these two pathogens is an infective nucleic acid. The nucleic acid of viruses is covered by an exterior shell (coat) of protein, but that of viroids is not.

Viruses are transmitted from plant to plant in several ways. The majority are transmitted by vectors such as insects, mites, nematodes, and fungi which acquire viruses during feeding upon infected plants. Some viruses are transmitted to succeeding generations by infected seed. Viroid's spread mainly by contact between healthy and diseased plants or by the use of contaminated cutting tools.

Nematodes

All soils that support plant life contain nematodes living in the water films that surround soil particles. Most nematodes feed primarily on microscopic plants, animals, and bacteria, but a few are parasites of animals; another relatively small group of nematodes parasitize plants. In addition to the plant injury that they cause directly, nematodes are important factors in disease complexes. Lesions and galls provide entrance courts for soil.

Some plants are classed as semi - parasites because they can live in the soil as independent plants for a time, but are not vigorous or may not flower if they do not become attached to a suitable host. The nutritional status of parasitic plants ranges from total parasites with no chlorophyll to plants that are well supplied with chlorophyll and obtain primarily water and minerals from their hosts.

Noninfectious agents of disease

Plants with symptoms are caused by noninfectious agents cannot serve as sources of further spread of the same disorder. Such noninfectious agents may be deficiencies or excesses of nutrients, anthropogenic pollutants, or biological effects by organisms external to the affected plants. On the farm, plant-damaging pollution may be caused by careless use of pesticides. Mishandled herbicides are by far the most damaging to plants. Off the farm, anthropogenic air pollutants are generated by industrial processes, and by any heating or transportation method that uses fossil fuels. The most common air pollutants that damage plants are sulfur oxides and ozone.

Activities:

3.4 Match the words in (List A) with their meanings in (List B).

List A		List B	
1	blight	a	the smallest and simplest forms of life which exist in large numbers in air, water and soil and cause a disease
2	symptom	b	containing harmful bacteria
3	fungus	c	to produce or create something
4	bacteria	d	to cause bad damage to something to the extent that it no longer exists
5	chlorophyll	e	any disease that kills a plant, especially crops
6	infected	f	the green substance in plants that absorbs light from the sun to help them grow
7	generate	g	a sign that something bad exists
8	destructive	h	any plant without leaves, flowers or green coloring, usually growing on other plants or on decaying material

3.5 Re-read the passage to correct the following sentences.

1. There is only one agent behind plant blights.
2. All fungi get their food from living plant cells.
3. None of the bacteria that cause disease in plants are non-spore-forming, rod-shaped, gram-negative cells.
4. Bacteria does not spread from plant to plant.
5. The nucleic acid of viroids is covered by an exterior shell (coat) of protein, but that of viruses is not.
6. Semi - parasite plants live in the soil as independent plants all the time.
7. On the farm, plant-damaging pollution may be caused despite the careful use of pesticides.

3.6 Fill in the blanks with words from the box.

irrigation contaminated host air pollutants spread
healthy parasites

1. live on other creatures and destroy them.
2. A rotten apple is a good for worms.
3. The field is barren. It needs more
4. Raising cattle should take place in the countryside, away from
5. Don't use this knife!!! The place is dirty and it might be with bacteria.

6. It is wiser to keep the sheep from the diseased ones.

7. The firequickly in the hay.

Pronunciation

3.7 Vowel Sounds

1. /o/ox fox odd top song gone long
adopt shot hot pot not

The letters (qua): quality quantity quarrel

It is also found in words such as: want wash watch
wander what was

It is not pronounced /o/ when it is followed by the letter (r), it is pronounced /o:/'

2. /o:/'orfork short storm port door
sword worn

The letters (al):also all always fall
although call almost chalk salt
talk walk false small

Exception (shall)

The letters (aught): caught taught daughter

Except (draught) /au/'

The letters (ought): ought bought brought
fought sought

The letters (aw): awful law saw draw
raw jaw dawn

It is also found in the following words: war warn
source court cause warm four
pour because pause fault author
water board

Listen and practice the difference between /o/ and /o:/'

fox forks pot port spot
sport cod cord

3. /u/'put full sugar

good book wood wool

could should would

woman wolf bosom

Grammar

3.8 Gerunds

A gerund is a noun formed by adding the suffix '**ing**'. The following are all gerunds:

sowing watering planting

Although a gerund is a noun, it can still take an object (like a verb). This is known as a gerund complement.

-Sowing the seeds should follow certain instructions.

-Watering the garden is necessary during summer.

-Planting fruits raises the national income in the country.

Or it can be the object after certain verbs, such as:

stop give up like enjoy hate
mind hear

-He enjoys **listening**to funny stories.

-The doctor asked him to give up **smoking**.

- I don't mind **lending** you the hose.

Or , we can use it after prepositions:

- We have nothing to do with cattle **raising**.

-She participates in apple **picking**.

-Do you have any idea about **fishing**?

Gerunds look identical to present participles
(adjectives formed from verbs)

Examples:

-**Grinding** the grains is his specialization. (Gerund,
i.e., a noun)

-Did you fix the **grinding**machine? (Participle, i.e.,
an adjective)

-**Reading** is a useful hobby. (Gerund, i.e., a noun)

-He did not understand the **reading** passage.
(Participle, i.e., an adjective)

-Sleeping in the open fields is an adventure to some people. (Gerund, i.e., a noun)

-It is dangerous to use sleeping pills without the doctor's consultation. (Participle, i.e., an adjective)

Activities:

3.9 Put the verbs in the brackets in the gerund or infinitive form as in the following example.

- They promised (clean) the barn .

They promised **to clean** the barn.

- Does (fish) need any instructions ?

Does **fishing** need any instructions?

Now, choose the right form for the following.

1. I want (eat) an apple .

2. She does not mind (eat) some apples with her family .

3. You don't have the right (sell) the crop now .

4. Does he know how (vaccinate) chickens ?

5. We are interested in horse (ride).

6. Do you believe in (share) experiences with other people ?

3.10 Classify the words in italics as 'gerunds' or 'continuous verbs'. Write G above the word if it is

used as a gerund. Write *P* above the word if it is a continuous verb.

Studying is a necessary activity in students' lives. Ahmed is **studying** for a geography exam. **Studying** takes many hours when students are in college. Students will be spending time on course work both in and out of class. In class, students are **going** to take notes, discuss issues, and ask questions. **Participating** in class discussions helps students understand the material. In a science lab, **carrying out** the experiments teaches the students to use their knowledge in practical ways. However, **concentrating** on lectures is sometimes rather impossible. With so many things **happening** in their lives, students are **finding** it difficult to concentrate. Students are **trying** to remind themselves to stay focused on the subject of the class.

Green finger

3.11 Read the following paragraph and then try to conclude the main ideas.

The control or prevention of virus diseases involves breeding for resistance, propagation of virus-free plants, use of virus-free seed, practices designed to reduce the spread by vectors, and, in some cases, the deliberate inoculation of plants with mild strains of a virus to protect them from the destructive effects of severe strains.

Writing

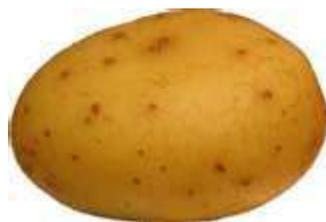
3.12

Potato and Tomato Blights



Tell your friend about the difference between potato and tomato blights (if any) by answering these questions:

1. In what season does each blight take place?
2. Are these two blights caused by the same factors? (Mention them)
3. Do the potato and tomato blights have the same effect on the crops?
4. What happens to potatoes and tomatoes when they get infected?
5. What are the ways to prevent or stop each blight?



Unit Four
Revision of Part One

1. Put the verb in brackets in *past continuous* form.

Example: Adil----- (read) a story.

Adil was reading a story.

1. They ----- (swim) in the pool.
2. It ----- (rain) yesterday afternoon.
3. I ----- (talk) to my friend.
4. She ----- (water) the plants.
5. The mobile ----- (ring).
6. You ----- (take) photos with my new camera, weren't you?
7. Sami ----- (repair) his brother's bike.
8. We ----- (have) breakfast in the garden yesterday morning.
9. The boys ----- (feed) the parrots.

2. Add (-ing) to the following verbs. Notice that you might need to do some spelling changes.

write -----

get -----

begin -----

drive -----

come -----

control -----

lie -----

hit -----

dance -----

cry -----

3. A- Put these words in the correct order to make questions.

- 1.were/ evening?/ you/ What/ yesterday/ doing
- 2.playing/ Who/with?/Sami/ football/was
- 3.nadia/ all/ last week?/ was/Which/ reading/ book
- 4.they/ studying/ for/ the/ Were/ exam?/ hard
- 5.the/ using/ computer?/ Adil/ When/ was

B- Now answer the questions above.

- 1.I was watching a movie.
- 2.-----.
- 3.-----.
- 4.-----.
- 5.-----.

4. Put the verbs in brackets into the gaps and form sentences in the past perfect.

Ex: Before Tariq ate his lunch, he *had washed* his hands.

- 1.She ----- (study) in London before she came to Baghdad.
- 2.After we ----- (eat) the cakes, Salma came in.
- 3.Before Rami visited his friend, he ----- (phone) him.
- 4.Before the students began to take the test, the teacher ----- (collect) the mobile phones.
- 5.After Maha ----- (finish) her breakfast, she started working on her computer.

5. Write the past participle forms of these irregular verbs.

forget -----
send -----
have -----
find -----
sink -----
cut -----
think -----
build -----
write -----
meet -----

6. Here are the past participle forms of some irregular verbs. Write the present forms.

swum -----
felt -----
won -----
been -----
sat -----
dug -----
done -----
chosen -----
taught -----
broken -----

7. Choose the correct form of the verbs.

1. I enjoy *browse/browsing* the Internet.
2. He likes *sleep/ sleeping* late.
3. They decided *to go/ going* to the theater tonight.
4. Hani finished *write/ writing* some emails.
5. Salma promised *help/ helping* me in my project.
6. He was sad for *lose/ losing* the football match.

8. Complete the following passage with suitable words from the box.

Flowering	safe	hives	problem	travel
honey				

Many beekeepers have bee ----- in their back yards. Some bees are even kept on city roof-tops. Bees can ----- several miles to collect nectar and pollen, so they do not need ----- plants close by. Most suburbs have plenty of flowers, and bees can make a good crop of local-----.

City beekeepers must take special care so their bees do not become a nuisance to neighbors, or even appear to be a ----- . We all want good neighborly relations!

Bee stings are usually neighbors' biggest concern. Usually, beekeepers can care for their bees in ways that allow neighbors to feel ----- and comfortable in their yards.

9. Re-arrange the following words to make sentences.

1. are/ soils/ light/ than/ soils/ impermeable/
heavy/ more
2. water/ of/ off/ drained/ some/ be/ the/ must
3. to/ good/ easier/ work/ a/ drainage/ soil/make
4. by/ air/ drainage/ incorrect/ and/ of/ water/
balance/ maintained/ is
5. technique/ is/ the/ ditching/ land/ most/
drainage/ important/ for

UNIT FIVE

Agricultural Machinery

Vocabulary

5.1 Fill in the blanks with words from the list below.

(**seeder** , mower , tractor , sickle , plough , harvester)



.....



.....



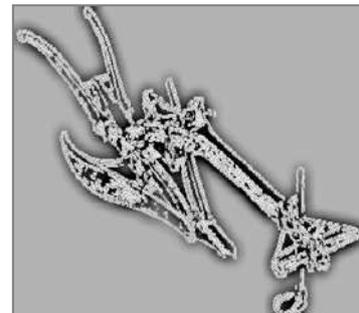
.....



.....



.....



.....

Speaking

5.2 Share with your classmates the full answers to the questions below.

1. Who patented a milking machine that replaced hand milking in 1679?
Anna Baldwin
2. Who patented the cotton gin on March 14, 1794?
Eli Whitney
3. By whom was the first grain elevator built in 1842?
Joseph Dart
4. Who invented the corn picker in 1850?
Edmund Quincy
5. When was the first cotton harvester patented?
In 1850
6. Who invented an automatic baler for hay in 1936?
Innes

Reading

5.3 State whether the following statements are true or false before you read the text below.

1. Today's farm machinery allows farmers to cultivate more than the machines of yesterday.
2. The tractor has been adapted for use in farming.
3. The steam-powered machines were low-powered by today's standards.
4. The most common type of threshing is called a planter.

5.4 Agricultural machinery

Agricultural machinery is any kind of **machinery** used on a **farm** to help with **farming**. The best-known example of this kind is the **tractor**.

Farming and farm machinery have continued to evolve. The threshing machine has given way to the combine, usually a self-propelled unit that either picks up windrowed grain or cuts and threshes it in one step. The grain binder has been replaced by the swather which cuts the grain and lays it on the ground in windrows, allowing it to dry before being harvested by a combine. Plows are not used nearly as extensively as before, due in large part to the popularity of minimum tillage to reduce soil erosion and conserve moisture. The disk harrow today is more often used after harvesting to cut up the grain stubble left in the field. Although seed drills are still used, the air seeder is becoming more popular with farmers. Today's farm machinery allows farmers to cultivate many more acres of land than the machines of yesterday.

Combines might have taken the harvesting job away from tractors, but tractors still do the majority of work on a modern farm. They are used to pull implements—machines that till the ground, plant seed, and perform other tasks.

The most common type of seeder is called a planter, and spaces seeds out equally in long rows, which are

usually two to three feet apart. Some crops are planted by drills, which put out much more seed in rows less than a foot apart, blanketing the field with crops. Transplanters automate the task of transplanting seedlings to the field. With the widespread use of plastic mulch, plastic mulch layers, transplanters, and seeders lay down long rows of plastic, and plant through them automatically.

After planting, other implements can be used to cultivate weeds from between rows, or to spread fertilizer and pesticides. Hay balers can be used to tightly package grass or alfalfa into a storable form for the winter months.

Besides the tractor, other vehicles have been adapted for using in farming, including trucks, airplanes, and helicopters, such as for transporting crops and making equipment mobile, to aerial spraying and livestock herd management.

Activities

5.5 Complete the sentences with words from the box.

spade	threshing	planting	drawbarbales
-------	-----------	----------	--------------

1. This tractor pulls a vehicle on a..... behind it.
2. The farmers need a machine for..... seeds.
3. There is an agricultural machine for making..... of hay.

4. They dig the soil with a

5. They used to do the by hand but now there are machines to do it.

5.6 Read the text again and complete the following sentences.

1. Some crops are planted by

2. After harvesting, the grain stubble left in the field are cut up with the

3. A uses a sickle bar to cut the stems of the crop.

4. Aerial spraying is made by.....

5. To reduce soil erosion and conserve moisture, are not used.

5.7 Find the words in the text for the following definitions.

1. Separating seed from a harvested plant mechanically.

2. Something that moves, progresses or acts on its own power without needing outside help.

3. A person or thing that seeds.

4. Someone or something that is moving, able to move or is being moved.

5. The act or an instance of transplanting.

6. Sharp, revolving circular blades, used to break up soil for sowing.

7. A harvesting machine that cuts and windrows grain and seed crops.

Pronunciation

5.8 /ʌ/ , /u:/ , /ə/

Notice how the following words are pronounced:

/ʌ/ mud love blood ton touch up
must

/u:/ goose two blue group soon
food

/ə/ About adore o'clock mirror
above

Activity

5.9 Label the following words according to the vowel sound.

young addition dust true lemon puzzle boot

Grammar

a. Adjectives

An **adjective** modifies a **noun** or a **pronoun** by describing, identifying, or quantifying words. An adjective usually precedes the noun or the pronoun which it modifies.

When using more than one adjective to describe a noun, place the adjectives in the following order before the noun.

NOTE: We usually use no more than three adjectives preceding a noun.

1. Opinion

Example: *an interesting book, a boring lecture*

2. Dimension

Example: *a big apple, a thin wallet*

3. Age

Example: *a new car, a modern building, an ancient ruin*

4. Shape

Example: *a square box, an oval mask, a round ball*

5. Color

Example: *a pink hat, a blue book, a black coat*

6. Origin

Example: *some Italian shoes, a Canadian town, an American car*

7. Material

Example: *a wooden box, a woolen sweater, a plastic toy*

Here are some examples of nouns modified with three adjectives in the correct order based on the list above. Notice that the adjectives are not separated by commas.

- a wonderful old Italian clock. (opinion - age - origin)
- a big square blue box. (dimension - shape - color)
- a disgusting pink plastic ornament. (opinion - color - material)
- some slim new French trousers. (dimension - age - origin)

Activities

5.11 Put the words in the boxes in the correct order.

m teache ol math's
y r d

1 _____

new a perfect system

6 _____

bla sma bo Turki a ol
ck ll x sh d

2 _____

art nic teach Fren ou
s e er ch r

7 _____

ma a fa friendl youn
n t y g

3 _____

a business horrib gree
a man le dy

8 _____

ta ou headmas frien
ll r ter dly

4 _____

a big old brown bear

9 _____

woode dar a tabl lon
n k e g

5 _____

ci a Spani beauti ol
ty a sh ful d

5.12 If Clause: Type 1

We use the first conditional clause when we are referring to something that is possible or likely to happen, because it is possible to fulfill the action.

Examples:

If we hurry, we will catch the bus.

		Main clause:	
If	Present Simple	<ul style="list-style-type: none">• Will-Future or• Modal Verb	Base Form + complement
If I	<i>study,</i>	I <i>will</i>	<i>pass</i> the exam.
If it	<i>doesn't rain,</i>	we <i>will</i>	<i>have</i> a picnic.
If Henry	<i>jogs</i> regularly,	he <i>might</i>	<i>lose</i> weight
If Matthew	<i>has</i> a job interview,	he <i>should</i>	<i>wear</i> a tie.

Note: The verb in the if-clause is almost always in the present simple.

Example: If you call him, he will come.

We can use the first conditional clause in offers and suggestions.

Examples:

-If you need a ticket, I can get you one.

- If you feel like travelling to Brazil, we can go there in August.

We can also use the first conditional, in warnings and threats.

Examples:

- If you go out with this clothes, you'll make yourself ill.
- If you don't apologize, I'll never speak to you again.

We sometimes use the present simple in both clauses (if-clause and main clause).

Examples:

- If you heat water, it boils.
- If you press this switch, the computer shuts down

Activity:

5.13 Complete the Conditional Sentences by putting the verbs into the correct form as in the first example.

1. If you **(send)** this letter now, she **(receive)** it tomorrow.

2. If you **send** this letter now, she **will receive** it tomorrow.

3. If I **(do)** this test, I **(improve)** my English.

4. If I **(find)** your ring, I **(give)** it back to you.

5. Layla **(go)** shopping if she **(have)** time in the afternoon.

6. The engineer **(go)** to London next week if he **(get)** a cheap flight.

7. If they **(study / not)** harder, they **(pass / not)** the exam.

8. If it (rain) tomorrow, I (have to / not) water the plants.

9. You (be able/ not) to sleep if you (watch) this scary film.

Green Fingers

5.14 Some tips for using agricultural machinery safely. Read them, close your book and try to remember these tips.

1. Make sure the machine is suitable for the job.
2. You should be able to recognize dangerous parts and think about how to prevent injury.
3. You should have a system to check that machinery is safe to use.
4. Use machines according to the instructions supplied with them.
5. Maintain machines so they can be used safely.

Writing

5.15 Write a paragraph on 'Ancient Ploughs' by rearranging the following steps.

1. That took longer time and lot of the energy was wasted.
2. Gone are the days,
3. But the modern farmers are aware and intelligent to invest in machines like tractors for plowing and other purposes.
4. when farmers had to use ancient ploughs for agriculture using animals



Wood Chipper



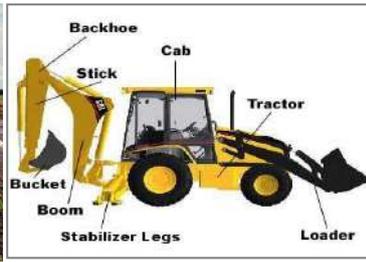
Plough



Farm Trailer



Rice Transplanter



Backhoe



Disc Harrow

UNIT SIX

Crop Production



Vocabulary

6.1 Match the words in List A with the corresponding information in List B.

List A		List B	
1	crop	a	to remove chaff by allowing it to be blown away by the wind
2	reaper	b	wheat planted in the spring and harvested in the late summer
3	grain	c	a machine that reaps, threshes, and cleans grain while moving over a field
4	cereal grain	d	seed of a cereal grain
5	spring wheat	e	a machine that cuts grain standing in the field
6	thresh	f	grass yielding grain for food
7	winnow	g	to beat out grain from stalks by trampling it
8	combine	h	grain or fruit gathered from a field as a harvest during a particular season

Speaking

6.2 Discuss answers to the following questions with your classmates.

1. What images spring to your mind when you hear the country Iraq?
2. What are the famous agricultural products in Iraq?
3. What do you know about Iraqi crops?
4. Where do Iraqi farmers get water from.
5. What are your thoughts on Iraqi dates?
6. What crops does Iraq export to the world?
7. What did ancient Iraqi people use in agriculture?



Reading

6.3 State whether the following statements are true or false before you read the text below.

1. As the population increase, food supply must be increased too.
2. Crop production began very recently.
3. The essential features of crop production have remained unchanged.
4. Cereals were the first crops to be grown by the primitive husbandman.
5. Cultivated plants are one of modern achievements and discoveries.
6. The old art of crop production is still dominant throughout the world.
7. Few new crop hybrids and varieties have been developed.
8. Herbicides are chemicals that are used to control weeds.
9. Today, the ways of controlling plant diseases and insects are ineffective.

6.4 Crop Production

As the population increased, the food supply was not always sufficiently stable or plentiful to supply his needs. Crop production began at least 9000 years ago when domestication of plants became essential to supplement natural supplies for human beings. The art of crop production is older than civilization, and its essential features have remained almost unchanged since the beginning of history. These features include:

1. gathering and preserving the seed of the desired crop plants,
2. destroying other kinds of vegetation growing on the land,
3. stirring the soil to form a seed bed,
4. planting when the season and weather are right as shown by past experience,
5. destroying weeds,
6. protecting the crop from natural enemies, and
7. gathering ,processing ,and storing the products.

Farm machines assist man in doing these things and enable him to do the work better.

The early husbandman cultivated a limited number of crops, the cereals being among the first to be grown in most parts of the world .The primitive husbandman removed by hand the destructive insects in his field. With advancing civilization materials such as sulfur, brine, ashes, soap, and vinegar were applied to plant to suppress diseases or insects.

Cultivated plants are a product of human achievement and discovery which has enabled man to provide his food and fiber needs with less labor.

The old art of crop production still predominates in farm practice throughout the world. Plant pathologists and entomologists have found ways to control plant diseases, insects and pests more effectively. Chemists and agronomists have found supplements for the manure and ashes formerly used for fertilizers. Rotations perhaps are slightly improved. Many new crop hybrids and varieties have been developed. The control of weeds with herbicides was realized in the 20th century. Better crop production follows the use of new facts, improved machines, and pesticides, and the growing of superior varieties.

Activities

6.5 Fill in the blanks with the suitable words from the box.

remained	gather	developed	began
increased	civilization	cultivated	

1. As the population -----, the food supply was not always sufficient.
2. Crop production ----- at least 9000 years ago.
3. The art of crop production is as old as-----.
4. Features of crop production have ----- almost unchanged the dawn of history.
5. Farmers have to ----- and preserve the seed of the desired crop plants.
6. The early husbandman ----- a limited number of crops.
7. Many new crop hybrids and varieties and have been -----.

6.6 Form nouns from the following verbs. All the nouns appear in the reading text.

domesticate supplement civilize include preserve form protect remove
cultivate destruct apply suppress achieve discover provide practise
rotate improve develop realize.

6.7 Form adjectives from the following nouns. All the adjectives appear in the reading text.

sufficient plenty nature desire remove destruction application
achievement progress slight

6.8 Supply the missing prepositions in the following sentences.

1. Farming can be carried successfully in conditions in which plants will grow.
2. The growing plant must be provided a supply of nutrients.
3. Glucose is often converted starch.
4. Light energy from the sun is transformed chemical energy.
5. All husbandmen should be aware the need for fertilizers.
6. Crops differ their fertilizer needs.
7. Soil vary nutrient deficiencies.
8. Types of soil vary one field to the next.
9. The first season of growth is devoted the growth of the vegetative parts.
10. The end of a rootlet consists a cap at the very tip.

Pronunciation

6.9 English Diphthongs

Diphthongs are types of vowels where two vowel sounds are connected in a continuous, gliding motion.

Pronounce the following words:

blind /blaɪnd/ blow /bləʊ/ bait /beɪt/ brown /braʊn/

1. /aɪ/ behind, hide, line, kind, silent, aisle, ally, eye, I, my, light, mind, guide, sigh.

2. /oʊ/ boat, road, hold, cold, home, rose, low, know, go, toe, though.

3. /eɪ/ face, raise, amazing, straight, hate, baby, paper, array

later, neighbour, bouquet, potato, grey, gauge, they

4. /aʊ/ foul, about, house, flower, out, how, now, allow, plough, ouch!

Activity

6.10 Identify the diphthong sound in the following words.

{coat same shy phone ice main shout game child mouse home}

Grammar

6.11 If Clause: Type 2

Examples:

1. If we had more employees, we would work more efficiently.
2. If we delivered poor quality, we would not be the leading company in our business.

Look at the following table:

(IF Clause)	(Main Clause)
If I got promotion,	I would buy a new TV.

or...

(Main Clause)	(IF Clause)
I would buy a new TV	if I got promotion.

The present unreal conditional is used to express a present (or future) condition. We call it unreal because it tells us what would happen or how things would be if the situation were different.

Form:

if clause	main clause
Simple Past	would + infinitive
	or
	could + infinitive
	or
	might + infinitive

Activities

6.12 Match List A with List B.

List A		List B	
1	You wouldn't like it	a	if you didn't join me.
2	If the weather was better,	b	who would do it?
3	If you didn't go to work,	c	we would ride on bikes.
4	I wouldn't go to the museum	d	if I told you the truth.
5	If the fitter didn't repair the car	e	would you go shopping?

6.13 Correct the form of the verb between brackets.

1. If I (see) Ziyad, I would give him your message.
2. If it didn't (rain), I could go outside.
3. If I finished work early, I (visit) my parents.
4. The manager would sign the contract if he (be) satisfied.
5. The company would win a lot if the advertisement (attract) consumers.

Green Fingers

Successful Crop Production

6.14 Read the following pieces of advice, close your book and then try to remember what you have read.

1. Use good quality seeds.
2. Prepare good seed bed for high germination percentages of seeds.

3. Drill your seeds in the right time by using seed-drillers.
4. After germination, irrigate your crop as necessary.
5. Control the weeds and other pests as required to make the field clean.
6. Add fertilizer in the right time to encourage the crop growth.
7. Monitor your crop frequently.
8. Harvest your crop when fully mature.

Writing

6.15 Write a short paragraph on "Crop Production in Your Region" Make use of the following questions.

1. Which crops are grown in your region?
2. Are seeds of these crops of high quality?
3. Why do farmers use fertilizers?
4. How do farmers harvest their crops?
5. What kinds of farm machines are used?

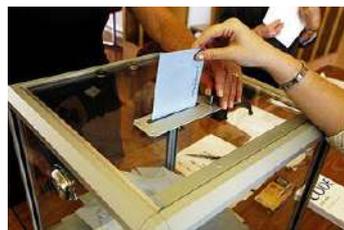
UNIT SEVEN

Human Rights

Vocabulary

7.1 Say what human rights the following pictures express and complete the sentence:

Human beings have the right to



7.2 Match the words in List A with their opposite meaning in List B.

List A	List B
1. fair	a. slavery
2. divisible	b. admit
3. liberty	c. unfair
4. life	d. inhuman
5. deny	e. death
6. certain	f. indivisible
7. human	g. uncertain

Speaking

7.3 Read the following conversation and play roles with your classmates.

Sally: Mark , you look exhausted!

Mark: I know. I didn't get enough sleep last night..

Sally: What happened?

Mark: You remember those young men I told you about?

Sally: The ones that just moved in next door?

Mark: Yeah. They had another party , and the noise kept me awake

all night.

Sally: Well , something has to be done. This has happened every weekend since they moved in!

Mark: Yeah. Tell me about it. I finally had to call the police.

Sally: I would have done the same thing .They shouldn't be allowed to disturb people like that. And anyway , they should have at least invited you to the party!

7.4 In pairs, try to ask and answer questions like:

1.What would you like to be in the future?

I'd like to be..... .

2. How can you achieve that?

I can

3.What is your favorite hobby?

My

4.What would you like to learn about?

I..... .



Reading 7.5 Before you read the passage on human rights, try to answer the following questions.

1.Do you think we have the right to work, to have good life and education? Why?

2.What do we call these rights?

3.Are human rights given or taken?

4. Who was Hammurabi? Do you think he defended human rights? How?

7.6 Human Rights



Human rights can be defined as the basic rights and freedoms that

that are held by human beings. They cannot be denied because of the colour of one's skin, religion, age, language or other personal factors. They can be classified into: cultural, economic, and political rights. Among these are: the right of life, work, liberty, vote, education, marriage own property and equality before law, and the right of association, belief, free speech, religion, fair wages, movement, and nationality. These rights are interrelated, interdependent and indivisible and they serve as a standard concern of people and form the basics of many national constitutions.

Historically speaking, all religions, philosophers and thinkers paid great efforts to establish human rights. The great event that ever happened was the announcement of the Universal

Declaration of Human Rights by the United Nations General Assembly on December 10th, 1948. Since then, governments are being obliged to serve assure granting human rights for groups and individuals.

Activities

7.7 Answer the following questions.

1. What are human rights?
2. Can they be denied? How?
3. How can human rights be classified?
4. Did religions, philosophers and thinkers pay great attention to human rights?
5. What was the greatest event that ever happened?
6. When was the Universal Declaration of Human Rights announced?
7. Why were human rights movements formed?

Pronunciation

7.8 Diphthongs (continued)

/oi/ can be found in words such as:

oil coil boil boy noise toy voyage destroy

enjoy soil employ moisture join spoil

/iə/ can be found in words such as:

fear clear near ear hear queer beard

/eə/ can be found in words such as :

care fairthere where wear compare hare

swear their bear spare various repair heir

/uə/ can be found in words such as:

newer fuel ensure doer secure sure mature

endure steward jewel obscure you're jury

Grammar

7.9 Adverbs

Examples:

Type	Adverb	Example
Manner	slowly	Jane drives slowly.
Place	here	The party is going to take place here.
Time	yesterday	I called him yesterday.

Adverbs are words that modify:

- a **verb** (He drove **slowly**. – How did he drive?)
- an **adjective** (He drove a **very** fast car. – How fast was his car?)
- another **adverb** (She moved **quite** slowly down the aisle. – How slowly did she move?)

Adverbs often tell when, where, why, or under what conditions something happens or happened. Adverbs frequently end in *-ly*; however, many words and phrases not ending in *-ly* serve an adverbial function and an *-ly* ending is not a guarantee that a word is

an adverb. The words *lovely, lonely, motherly, friendly, neighborly*, for instance, are adjectives:

That **lovely** woman lives in a **friendly** neighborhood.

Adverbs are used to describe **how, where, when, how often** and **why** something happens. Here are a few examples:

a. Adverbs modify verbs:

The cat climbed **quickly** up the tree. ('**quickly**' describes how the cat climbed).

b. Adverbs modify adverbs:

Mike worked **very carefully** on his paper. ('**very**' shows how carefully he worked).

c. Adverbs modify adjective:

She is **nearly** ready to go. ('**nearly**' tells to what extent she is ready)

The most common adverbs are:

1. Adverbs of manner: describe how something happens.

Some commonly used adverbs of manner include:

(carefully, correctly, eagerly, easily)

I watch them **closely**.

I play **well**.

I walk **carefully**.

2. Adverbs of time:

He has not played chess **recently**.

I arrive **late** for most appointments.

Lately, I have had many sleepless nights.

3. Adverbs of place: answer the question *Where?* •

- I walked **downstairs**.
- Have you gone **there**?
- I will meet you **outside**.

Adverb Formation

Adverbs that end in **-ly** are formed by adding **-ly** to an adjective, a present

participle or a past participle.

- from an adjective:

careful carefully, beautiful beautifully, fitting
fittingly

-from a present participle:

willing willingly, glowing glowingly, surprising
surprisingly

-from a past participle:

assured assuredly, affected affectedly

When adjectives end in **-able** or **-ible**, the adverb is formed by replacing final **-e** with **-y**:

Horrible horribly, terrible terribly

When an adjective ends in **-y**, the adverb is formed by replacing the

final **-y** with **-ily**:

happy happily, lucky luckily

When adjectives end in **-ic**, the adverb is formed by replacing the final **-ic** with **-ically**:

Economic economically, ironic ironically

The Order of Adverbs:

Subject	Verb	Manner	Place	Time
He	walks	impatiently	into town	before supper

Activities

7.10 A. Re-write the following sentences as in the example.

1. The fitter repaired the car (yesterday, successfully, in the work- shop).
The fitter repaired the car successfully in the workshop yesterday.
2. The farmer milked the cow (in the farm, last Monday, quietly).
3. Iraqi football team played (in Doha, last week, beautifully).
4. The doctor examined me (thoroughly, at his clinic, last week).
5. They arrived (here, quickly, two days ago).

B. Classify the following adverbs into three groups as follows:

Manner Place Time

somewhere , eagerly , now , downstairs , well
, recently, hard , outside , soon , fast , after,
there

7.11 If Clause Type 3: (Impossibility)

The *third conditional* (also called *conditional or impossibility type 3*) is a structure used for talking about **unreal situations in the past**.

The Structure of If Clause (impossibility)

Like the other conditionals, a third conditional sentence consists of two clauses; an **if clause** and a **main clause**:

if clause	main clause	explanation
if I had studied harder,	I would have passed the exam.	I failed the exam, because I didn't study hard enough.

When the **if clause** comes first, a comma is usually used.

main clause	if clause
I probably would have passed the exam	if I had studied harder.

We use different verb forms in each part of a third conditional:

if
clause

if + subject + past perfect verb

main
clause

subject + *would* (OR *could*, OR *might*)
have + past participle

The past perfect is formed with the auxiliary verb **had** and **the past participle** form of the verb.

Note also that third conditional forms can be contracted:

Full form

If I had studied harder, I probably
would have passed the exam.

Contracted
form

If I'd studied harder, I probably
would've passed the exam.

Using the third conditional:

The third conditional is used to talk about things which did not happen in the past. It is often used to express criticism or regret:

Example

If you had driven more
carefully, you would
not have had an
accident.

If we had played a

Explanation

Criticism: *You had an
accident because you
didn't drive carefully
enough.*

Regret: *We didn't play*

little better, we
could have won the
game.

well, so we lost the game.

If you had saved your
money, you could have
bought a computer.

Criticism: *You didn't save
your money, so now you
can't afford a computer.*

If it had snowed, we
could have gone
skiing.

Regret: *It didn't snow, so
we couldn't go skiing*

Activities

7.12 Complete the following sentences.

1. If I had found her address, I.....
2. If I hadn't studied hard, I.....
3. Mazin would have bought the car if.....
4. If we had played well in the match, we.....
5. She would have done her job properly if.....

7.13 Join each pair of the following sentences with (if).

1. Anwar had seen her boss. She would have handed him the report.
 2. They would have postponed the match. It had rained heavily.
 3. The students had left early. They would have arrived on time.
 4. I would have enjoyed myself. I had travelled abroad.
-

5. You would not have missed the bus. You had come early.

Human Corner

7.14 Read the following wise sayings about human rights and try to remember them after you close your book.

-I would rather die on my feet than live on my knees.

-True peace is not merely the absence of tension, it's the presence of justice.

-Hope is power.

-You must not lose faith in humanity .Humanity is an ocean.

-Please use your freedom to promote ours.

-Spread love everywhere you go: first of all in your own house.

-I am only one, but still I am one.

- I cannot do everything, but still I can do something;

And because I cannot do everything

I will not refuse to do the something that I can do!

Writing

7.15 A. Write an Email to a friend of yours. Tell him that you have studied a subject called "Human Rights" in your English book. Tell him how you enjoyed it and you want to see him to speak about the

matter. If you want any aid, ask your teacher and classmates.

Begin like this:

I'd like to tell you that.....

B. Find the human rights in the word box below and then write them in your copybook

A	M	C	B	A	M	N	O	W
R	B	A	H	E	X	S	E	O
L	I	C	R	V	L	V	W	R
A	I	G	J	R	U	I	F	K
W	U	B	I	N	Y	M	E	O
L	I	F	E	S	G	Q	E	F
E	R	B	C	T	P	J	L	H
Q	R	D	E	D	Y	L	I	K
J	O	G	F	V	O	T	E	Q
E	D	U	C	A	T	I	O	N

Unit Eight
Revision of Part Two

1. Put the verb between brackets into the correct form.

1. If you practice more, you (speak) English better.
2. Salwa will lend her sister the money if she (ask) her.
3. If Ahmed sells his car, he (not/ buy) another one.
4. Many people will get jobs if the new factory (open).
5. The plant pots (dry) if you don't water them twice a week.
6. If we go late to the party, they (be) upset.
7. If Salma (put) the dictionary on the shelf, she'll know where to find it tomorrow.
8. If you push the fridge into the corner, you (have) more space in the kitchen.

2. Complete these sentences with true ideas about yourself.

1. If you worked out more, your health would be better
2. I'd be angry if -----
-----.
3. If you bought new CDs, -----
-----.

4. Would you go to the park if -----
-----.

5. If I didn't go to school tomorrow, -----
-----.

6. I'd talk about human rights if -----
-----.

3. Put the verb between brackets into the correct form.

1. If Sami (be) offered another job, he would leave this company.

2. My brother gave me his CDs. He (be) very angry if I lost them.

3. I could help you if I (know) you that you were sick.

4. We would need another car if we (go) together.

5. If you (come) to the country this time of the year, you would take many photos.

6. We (have) lunch in the garden if the weather was good.

7. If Mazin had extra money, he (buy) a new car.

8. You would wake up early if you (go) to bed early.

9. I would visit Maha if I (know) her address.

10. If Noor's teacher asked her a question, she (answer) her.

4. Put the verb between brackets into the correct form.

1. If I (attend) the meeting, I could have explained the project better.

2. Salma might have cleaned the garden if the weather (be) good.
3. Adil didn't know that I was in town. If he'd known, he (visit) me.
4. You'd have missed your appointment if you (go) late.
5. Muna is staying up working on her project these days. If she'd been tired, she (sleep) early.
6. If you'd had some time, you (plant) some trees in your garden.

5. Choose the correct word.

1. The food tastes a little -----.
(strange/ strangely)
2. Hani feels ----- (angry/ angrily) when he watches football.
3. You need to design the garden-----.
(proper/ properly)
4. Huda looks ----- (nice/nicely) today.
5. The children are playing ----- (happily/happy) in the park.
6. The accident was ----- (terribly/terrible).

6. Put the right word in the blank.

1. Fatima is a nice lady. She treats everyone ----
-----.
2. I was working hard in the garden this morning. Gardening is ----- work.
3. The baby is sleeping; go out of the room quietly. Please be -----.

- 4.They are noisy boys. They are playing computer games -----.
- 5.Tariq speaks quickly. He is a ----- speaker.
- 6.The children are celebrating Mary's birthday happily. They are -----.
- 7.BMW is a fast car. It can go -----.
- 8-My mother is a good cook. She cooks -----.

7. Answer the following questions in order to make a paragraph.

What tools do you need for gardening? What is the machinery needed for a farm? Do the tools of gardening differ from those used in farming? How do they differ and why? What are the basic tasks required to have a tidy garden?

8. Complete the following sentences with a suitable word.

Bees	honey	flowers
hive	sweet	

- 1.Salma loves ----- . Her garden is full of them.
- 2.----- are insects.
- 3.There is a ----- in our garden.
- 4.The coffee tastes so -----.
- 5.Muna likes ----- with lemon.

9. In your opinion what do human rights mean? Why are they important to maintain? What do you think of the Article No.1 of the United Nations Universal Declaration of the Human Rights:

"All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood."

What does it mean to you?

Mini Dictionary

Unit One

hive	خلية نحل	insects	حشرات	sweet	حلو ، عذب
bees	نحل	nectar	رحيق	lay	يضع
buzz	يطن ، طنين	queen	ملكة	together	سوية
drone	ذكر النحل	sting	يلسع	guard	يحرس
flower	وردة	stripes	ضربات، خطوط	female	أنثى
honey	عسل	swarm	جماعة النحل	defensive	دفاعي
thorax	الصدر	wings	أجنحة	combs	أقراص عسل
abdomen	بطن، جوف	groom	عريس، يهيبئ	mate	رفيق
vision	بصر	digestive	هضمي	dependent	تابع
attached	ملتحق	tend	يميل	pollen	لقاح
source	مصدر، مورد	energy	طاقة	collect	يجمع

primarily	قبل كل شيء	feed	يطعم	larva	يرقة
inevitably	لا بد منه	pistils	المدقة	species	صنف
cross-pollination	تلقيح هجين	symbiosis	علاقة تبادل منفعة	mutualism	التبادل
association	مرافقة، جمعية	beneficial	مفيد، نافع	feathery	ريشي، خفيف
hoard	ذخيرة، يدخر	exploit	يستغل	harvest	حصاد
consumption	استهلاك	contribute	يسهم	colony	مستعمرة
maintain	يحافظ على	humidity	رطوبة	secrete	يفرز
wax	شمع	forage	يطوف بحثاً عن الطعام	odor	رائحة
perception	إدراك	accurate	دقيق	distance	مسافة

drainage	تصريف	irrigation	ري	remove	يزيل
apply	يستخدم	require	يتطلب	technique	تقنية
ditch	خندق، قناة	advantage	فائدة	porous	مسامي
tile	قرميد، يكسو بالقرميد	obtain	يحصل على	subterranean	جوفي
soil	تربة	allow	يسمح	downward	للأسفل
ease	سهل	depends on	يعتمد على	proportion	نسبة
coarse	شديد، خشن	particles	جسيمات، ذرات	sand	رمل

clay	طين	percolate	يقطر	pass	يمر ، يمر
impermeable	قابل للنفاذ	excess	زائد	aerobic	
humus	الدبال : تنشأ من تحلل النباتات	intervals	فواصل	crops	محاصيل
straight	مستقيم	sloping	منزلق	regularly	بانتظام
draw	يسحب	surplus	فضلات	permeability	نفاذية
accumulate	يتجمع	underground	تحت الأرض	deficit	نقص
distinguish	يميز	collection	تجميع	application	تطبيق
former	سابق	vital	حيوي	reservoirs	مكامن
latter	لاحق	deposits	ترسبات	canal	قنال
dams	سدود	amount	كمية	required	مطلوب
factors	عوامل	capacity	سعة	particular	محدد
sugar cane	قصب السكر	frequent	متكرر	onwards	إلى الأمام
compost	زميح	peat	مادة متفحمة	moss	طحلب
manure	سماد	tiller	زراع الدفة	squash	القرع

Unit Three

blight	آفة زراعية	agent	عامل
represent	يمثل	Nematodes	الدودة السلكية أو الخيطية : دودة طفيلية
pumpkin	يقطين	parasite	نبات أو حيوان أو حشرة متطفلة
symptoms	أعراض	noninfectious	غير معد
fungus	فطريات	derive	يستمد من
bacteria	بكتريا	host	مضيف
chlorophyll	الكلوروفيل : الصبغة الخضراء	association	ارتباط مع
infected	مصاب	tissue	نسيج
generate	يولد	obligate	مسير : ذو طريقة حياتية واحدة
destructive	مدمر	utilize	يستخدم
protect	يحمي	rod-shaped	نبات ينتج حبا"
expression	تعبير عن	foliage	عصوية الشكل
pathological	مرضي	pathogen	الكائن الممرض
manifestation	إظهار ، إبداء	dependent	يعتمد على
splashing	يرشش، يتساقط أو يتناثر على شكل قطرات	disorder	اعتلال ، اضطراب
irrigation	ري	deficiency	نقص
infective	معدى	excess	زيادة في : إفراط

nucleic acid	الحامض النووي	pollutants	ملوثات
acquire	يكتسب، ينال	pesticide	مبيد الذباب أو الجرذان أو الطحالب
transmit	ينقل	mishandle	يسيء المعاملة : يسيء الإدارة
mite	سوسة، عثة	herbicide	مادة مبيدة للأعشاب الضارة
vector	حشرة ناقلة لجراثيم مرض	sowing	بذار
nematodes	الدودة السلكية أو الخيطية: دودة طفيلية	grinding	طحن
contaminated	ملوث	control	سيطرة
propagation	توالد، تكاثر، نشر، بث	gall	تضخم في النسيج النباتي ناشئ عن بعض الفطريات أو الطفيليات
Virus-free	خال من الفيروسات	nutritional	غذائي
reduce	يقلل	status	مرتبة، حالة، وضع
Inoculation	تلقيح : تطعيم	supplied with	مزود أو مجهز ب
strain	سلالة : نوع : صفة أو نزعة موروثية	nutrient	مادة مغذية
saprophyte	كلنبات يعيش على المادة العضوية الميتة	pollutants	ملوثات
cultural	مستولد : حاصل بالاستيلاء	fossil	متحجر
lesion	آفة : ضرر : أذى	fuel	وقود

Unit Five

seeder	ناثر البذور	mower	قاطعة العشب	tractor	الجرارة
sickle	المنجل	plough	محرث	harvester	الحاصدة
patent	يسجل اختراع	gin	محج	grain	حبوب
baler	أداة رزم البالة	evolve	يتطور	self-propelled	ذاتي الدفع
windrow	رصف التبن	thresh	يقلب	swather	أداة حفر السواقي
tillage	آلة حرث	erosion	تآكل ، تعرية	harrow	مسحاة
stubble	بقية الزرع بعد الحصد	acre	قطعة أرض	rows	صفوف
blanketing	تغطية	transplanter	ناقل الغرسات	pesticides	مواد عضوية
		hay	قش ، تبن	alfalfa	نبات الفصفصة

Unit Six

principles	أسس , مبادئ	older	أقدم
primitive	بدائي	civilization	مدن
wild game	بري	features	خصائص
berries	صيد الحيوانات	remained	بقيت
population	ثمار التوت أو العليق	unchanged	لم تتغير
supply	سكان	dawn	فجر
sufficiently	تجهيز	history	التاريخ
stable	إلى حدٍ كافٍ	include	تتضمن
plentiful	مستقر	gathering	جمع
needs	وفير	preserving	حفظ
production	حاجات	desired	مرغوب
domestication	إنتاج	destroying	تخطيم
essential	تدجين	vegetation	غطاء نباتي
supplement	أساسي	stirring	إثارة (تهيج)
	تكملة	seed bed	مهد البذرة
	مواقع	season	موسم
	فن	weather	الجو

localities	في الماضي	achievement	إنجاز
art	خبرة	t	اكتشاف
past	الأدغال	discovery	ألياف
experience	وقاية , حماية	fibre	بتقدم ، بتطور
weeds	طبيعي		عمال
protecting	أعداء	progressiv	سائد ، يسود
natural	تصنيع	ely	تطبيق عملي
enemies	خزن	labour	اختصاص بأمراض النبات
processing	منتجات		اختصاص بالحشرات
storing	حقل	predominat	آفات
products	مكائن	e	بكفاءة
farm	فحسب	practice	الكيمائي
machines	يُسرع	pathologis	المشتغل بالمحاصيل الحقلية
merely	يُمكن	t	السماذ الأخضر
speed	المزارع		سابقاً
enable	مزرودة , زرع	entomologi	أسمدة كيميائية
husbandman	محدود	st	دورة زراعية
cultivated	محاصيل الحبوب	pests	على نحو طفيف
limited	أزال		هجن
cereals		effectivel	أصناف
removed		y	
		chemists	
		agronomist	
		manure	
		formerly	
		fertilizer	
		s	
		rotation	
		slightly	
		hybrids	
		varieties	

Unit Seven

aisle	ممر	announceme nt	بيان	belief	معتقد ، إيمان
constituti on	دستور	cultural	ثقافي	focus	يركز
declaratio n	إعلان	equality	مساواة	factors	عوامل
deny	ينكر	fundamenta l	أساسي	indivisi ble	لا يتجزأ
interdepen dent	مستقلة فيما بينها	interrelat ed	متداخلة	violate	يخرق