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И ПРОДОВОЛЬСТВИЯ РЕСПУБЛИКИ БЕЛАРУСЬ

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АНГЛИЙСКИЙ ЯЗЫК

**Модуль
«Сельскохозяйственная техника»**

*Пособие
для студентов ФТС в АПК, ИТФ и АМФ*

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1. КОМПЛЕКСНАЯ ЦЕЛЬ МОДУЛЯ

В результате изучения темы студент должен:

• знать:

1 уровень (А): 1) лексический материал по теме «Farm Machinery»; 2) а) что такое инфинитив, его признаки, формы инфинитива в действительном и страдательном залоге, функции в предложении (The Infinitive); б) объектный инфинитивный оборот (The Complex Object); в) субъектный инфинитивный оборот (The Complex Subject); 2) должны сформировать навыки следующих видов чтения: изучающего, ознакомительного, просмотрового.

Максимальная оценка знаний на 1 уровне (репродуктивном) – 6 баллов.

2 уровень (В) – знать и характеризовать: 1) лексический материал по теме «Farm Machinery»; 2) а) признаки инфинитива, формы инфинитива в действительном и страдательном залогах, функции инфинитива (The Infinitive); б) объектный инфинитивный оборот (The Complex Object); в) субъектный инфинитивный оборот (The Complex Subject); 2) должны сформировать навыки следующих видов чтения: изучающего, ознакомительного, просмотрового.

Максимальная оценка знаний на 2 уровне (продуктивном) – 8 баллов.

3 уровень (С) – знать, характеризовать и анализировать: 1) лексический материал по теме «Farm Machinery»; 2) а) формы инфинитива в действительном и страдательном залогах в различных функциях в предложении (The Infinitive); б) объектный инфинитивный оборот (The Complex Object); в) субъектный инфинитивный оборот (The Complex Subject); 2) должны сформировать навыки следующих видов чтения: изучающего, ознакомительного, просмотрового.

Максимальная оценка знаний на 3 уровне (творческом) – 10 баллов.

• **уметь:**

1 уровень (А): 1) анализировать иноязычный текст (его структурные, лексические и стилистические особенности) с позиций требований к знаниям 1-го уровня; 2) читать, переводить, понимать на слух тексты по профилю обучения (изучающее чтение, ознакомительное чтение и поисковое чтение); 3) вести общение профессионального и социокультурного характера на английском языке по предложенной модели, сочетая диалогические и монологические формы речи; 4) понимать иноязычную *речь* в объеме программной тематики; 5) использовать английский язык в качестве инструмента профессиональной деятельности: перевод на русский язык, реферирование профессионально ориентированных текстов.

Максимальная оценка знаний на 1 уровне (репродуктивном) – 6 баллов.

2 уровень (В): 1) анализировать иноязычный текст (его структурные, лексические и стилистические особенности) с позиций требований к знаниям 2-го уровня; 2) читать, переводить, понимать на слух тексты по профилю обучения; уметь обобщить содержание текста; 3) вести общение профессионального характера на английском языке в различных стандартных ситуациях, пользуясь правилами речевого этикета, сочетая диалогические и монологические формы речи; 4) понимать иноязычную *речь* в объеме программной тематики; 5) использовать английский язык в качестве инструмента профессиональной деятельности: перевод на русский язык, реферирование, аннотирование, составление тезисов, профессионально ориентированных текстов.

Максимальная оценка знаний на 2 уровне (продуктивном) – 8 баллов.

3 уровень (С): 1) анализировать иноязычный текст (его структурные, лексические и стилистические особенности) с позиций требований к знаниям 3-го уровня; 2) читать, переводить, понимать на слух тексты по профилю обучения; уметь комментировать информацию из текста, сделать из прочитан-

ного вывод; 3) вести общение профессионального характера на английском языке в различных нестандартных ситуациях, пользуясь правилами речевого этикета сочетая диалогические и монологические формы речи; 4) понимать иноязычную *речь* сверх программной тематики; 5) использовать английский язык в качестве инструмента профессиональной деятельности: перевод на русский язык, реферирование, составление тезисов, аннотаций, резюме аутентичных профессионально ориентированных и научных текстов.

Максимальная оценка знаний на 3 уровне (творческом) – 10 баллов.

2. НАУЧНО-ТЕОРЕТИЧЕСКОЕ СОДЕРЖАНИЕ МОДУЛЯ

2.1. Словарь-минимум по теме «Сельскохозяйственная техника»

ACTIVE VOCABULARY (TEXT A)

Verbs

apply fertilizers	вносить удобрения в почву
break (broke, broken) up the layers of soil	разбивать на мелкие куски пахотный горизонт
break down the soil	рыхлить почву
compact	утрамбовывать
crush the clods	дробить глыбы, комья земли
cover seeds	заделка семян
consolidate the soil	трамбовать, уплотнять почву
destroy (syn. eliminate) weeds	удалять сорняки
disk	дисковать почву
fertilize the soil	удобрять почву
fallow	вспахивать под пар
harrow	бороновать почву
hoe out the weeds	пропалывать междурядья
level the ground	выравнивать почву
mulch	мульчировать
plant	сажать
prevent weeds	предотвращать сорняки
prepare seedbed	готовить семенное ложе
penetrate	проникать
pull	тянуть, тащить
stir the soil	рыхлить почву
sow (saw, sown) seeds (syn. place)	сеять семена
transmit	передавать

Nouns

barnyard manure	навоз
beet cultivator	свекловичный культиватор
bean cultivator	культиватор для бобовых культур
broad- cast planter	сеялка для пропашных культур
baler	пресс-подборщик, сеной пресс
beet harvester	машина для уборки свеклы
cultivation machinery (syn. cultivator)	культиваторы
chisel cultivator	чизель-культиватор
combine harvester	зерноуборочный комбайн
components	деталь
disc plow	дисковый плуг
disk harrow	дисковая борона
digger	копатель
disc coultter	дисковый нож
farm machinery	сельскохозяйственная техника
fertilizing equipment	машины для внесения удобрений
field cultivator	культиватор для обработки паров
fertilizer distributor	туковая сеялка
frame	рама
granular fertilizer	гранулированное удобрение
grain drill	зерновая сеялка
harvesting equipment	уборочные машины
harrow	борона
heavy machinery	тяжелая техника
headstock	присоединительная стойка навесного орудия

lister cultivator	культиватор для бороздовых посевов
moldboard	отвал
manure spreader	навозоразбрасыватель
moldboard plow	отвальный плуг
motion	движение
mounted plow	навесной плуг
mower	косилка
plow; plough	плуг
power operate device	автоматическое устройство
primary tillage equipment	почвообрабатывающие орудия для первичной обработки
planting equipment	посевные машины
potato harvester	картофелеуборочный комбайн
rotary hoe	ротационная мотыга
rod weeder	штанговый культиватор
roller	каток, валец, валик, ролик
row-crop planter	широкорядная сеялка
rake	грабли
semi mounted plow	полунавесной плуг
sub-soiler	почвоуглубитель, глубокорыхлитель (без оборота пласта)
spike tooth harrow	зубовая борона
spring tooth harrow	пружинная борона
secondary tillage equipment	почвообрабатывающие орудия для последующей обработки
sprayer	опрыскиватель
share	лемех, сошник
skim coulter	предплужник, дерносор

tillage	обработка почвы
tools for mulching and fallowing	орудия для мульчирования и вспахивания под пар
thinner	прореживатель
track-laying tractor (syn. crawler)	гусеничный трактор
wheeled tractor	колесный трактор

ACTIVE VOCABULARY (TEXT B) Verbs

aim	ставить цель
carry out	выполнять
construct	сооружать, создавать, конструировать
crush	разбивать (комья земли), повреждать
deliver	доставлять, поставлять
eliminate	устранять, уничтожать
equip with	оборудовать, оснащать
fit	подгонять, оснащать
outweigh	перевешивать
pass down	проходить (ряды), обрабатывать
replace	замещать, заменять
shift gears	переключать передачи
subdivide	подразделять
tow	тащить, буксировать, тянуть

Nouns

advantage	преимущество, превосходство, выгода, польза
bush cleaning	чистка кустов
clutch	сцепление
convenience	удобство
digging	копание; рытье; земляные работы; выемка грунта

ditch – filling	засыпка канав
hauling	транспортировка, буксировка
hoe	мотыга; тяпка; кирка; культиватор; ковш (экскаватора)
horsepower	мощность в лошадиных силах, лошадиная сила
initial cost	себестоимость
land levelling	выравнивание
maintenance	обслуживание, текущий ремонт, ремонт и содержание, техобслуживание, профилактический ремонт
misconception	заблуждение
power take off shaft (PTO)	вал отбора мощности

Adjectives

common	универсальный, общий, простой, обычный, обыкновенный
distinctive	отличительный
domestic	домашний
essential	обязательный; необходимый; основной; неотъемлемый; существенный; весьма важный; ценный
initial	начальный
multi-purpose	комплексного назначения, универсального применения
ordinary	обыкновенный, стандартный, простой, несложный
rear	задний
sophisticated	сложный (о приборе, машине, системе и т. п.), комплексный, тщательно разработанный

2.2. Основные тексты

TEXT A

FARM MACHINERY

1. We know the farmer to have a wide range of machinery to plow and disk, and harrow, and plant, and fertilize, and finally harvest faster, easier and more profitably today. The machine is known to be a device that uses force to accomplish something transmitting and changing force or motion into work.

2. Agricultural implements and machines being very numerous and diversified now may be divided into 4 main groups: tillage equipment, planting equipment, fertilizing equipment, harvesting equipment.

3. The aim of tillage is to prepare the soil for planting and to keep it loose and free from weeds during the growth of crops. The **primary tillage equipment** used by the farmer includes plows, sub-soilers, and thinners. The **secondary tillage equipment** embraces harrows, rollers and tools for mulching and fallowing. Plow is designed to eliminate weeds, to prepare a suitable seedbed, to improve the physical condition of the soil. Plows fall into mounted, semi mounted, disc, moldboard plows. The main components of ploughs are the main frame, the share, the moldboard, the disc coulter, the skim coulter, the headstock. The function of sub-soiler is to penetrate into the deeper depths and break up the layers of soil which have become compacted due to the movement of heavy machinery. A harrow is an implement used to level the ground and crush the clods, to stir the soil, and to prevent and destroy weeds. There are three principal kinds of harrow namely the disk, the spike-tooth, and the spring tooth.

4. Cultivation machinery is used to break down the soil before or after a crop is sown for covering seeds, for consolidating the soil and for hoeing out weeds. There are several types of cultivators designed for special crops and conditions: beet and bean cultivators, lister cultivators, rotary hoe cultivators, rod weeders, field

cultivators, sub-soil and chisel cultivators.

5. **Planting equipment** is any power-operated device introduced to place seeds or plant parts in or on the soil for production of food and feed crops. It is classified as row-crop planters, broadcast planters, grain drills and planting attachments for other equipment.

6. Applying such types of fertilizers as barnyard manure, granular fertilizers, and fertilizers in liquid and gaseous form is necessary where soils are deficient in plant food elements. Such **fertilizing equipment** as manure spreaders, fertilizer distributors, sprayers are in use.

7. Crops are harvested by the use of many kinds of **harvesting equipment** for all types of crops. The principal machines required to make hay are mowers, rakes, balers. Grain and all types of seed crops are harvested by combine harvesters. Beet harvesters are available to harvest beet, potato harvesters and diggers being for potatoes.

8. The tractor is the most important machine pulling many kinds of implements that cultivate plant, fertilize, and harvest. Wheeled tractors being used for general farm work, track-laying tractors or crawlers have the great advantage that they can be available for heavy loads on any class of land.

TEXT B

TRACTORS

A tractor is a type of vehicle that is particularly constructed to efficiently deliver a tractive effort at a slow speed. The word *tractor* was taken from a Latin word that means “to pull”. Tractors are special vehicles which are aimed to provide the hauling of trailers and other types of machinery which are used for agricultural and construction purposes.

Farm tractors first made their appearance in the nineteenth cen-

tury. The earliest ones had steam-powered portable engines. These were followed by oil-burning and then gasoline-powered tractors. The steam powered engines were in use until the onset of the 20th century, when they were replaced by more reliable internal combustion engines.

A farm tractor is a distinctive, multi-purpose farm vehicle. It is perhaps the most essential of all farm machinery. Farm tractors are used to carry out different agricultural tasks: pulling or pushing machines and trailers for tilling, plowing, harrowing, planting, disking, transporting and providing power supply and other tasks.

A variety of specialized farm tractors have been developed for particular uses. Farm tractors may be divided into two groups: wheeled and track-laying. Wheeled tractors may be subdivided into standard and row-crop types. Standard wheeled tractors are used for general work and do not have the special features associated with row-crop tractors. Row-crop tractors can be used for all ordinary purposes, but in addition they are specially designed for working on root and other row crops. The tractor can pass down rows of corn, tomatoes or other crops without crushing the plants.

Track-laying tractors or crawlers have the great advantage that they can be used for heavy loads on almost any class of land. They are considerably more economical in fuel than are wheel machines, but their greater initial cost and their maintenance particularly that of the tracks, may outweigh this advantage. The crawler is, however, the more efficient type of tractor and, moreover, can go on the land earlier after rain and so can work a greater number of days per year.

Modern farm tractors may have eight-wheel drive unit, caterpillar tracks, or articulated or non-articulated tracks, electrical or computer controls and are capable of multitude of different functions. Many modern farm tractors are fitted with GPS devices, auto-steer systems and other automated features. Modernized tractors may also have cabs accessorized with heated seats, automatic temperature controls, and dashboard computers.

Tractors offer a lot of use and convenience for many people. Tractors are also usually associated with farm machines and general farm use. However, there is a common misconception that they can only be found on farms. In addition to pulling implements like plows and cultivators a tractor may be used for bush-cleaning, ditch filling and land-leveling. Small tractors from one to ten horse power with single or twin cylinder petrol engines may be used for garden and orchard work.

TEXT C

Ознакомительное чтение (Fact-Finding Reading)

Tractors are the workhorses of modern agriculture. These powerful and iconic machines, thanks to their legendary versatility, play many roles on today's farms. Let's take a look at some of the main components of today's tractors.

The engine is the heart and soul of any tractor. When they were first invented, tractors used steam engines, which were notoriously unreliable, not to mention dangerous. Since the 20th century, however, tractors have used internal combustion engines that run on a variety of fuels, from kerosene to ethanol and gasoline. Most modern tractors today run on diesel and biodiesel. These powerful engines typically range in size from 18 to 575 horsepower, giving them all of the incredible power they need to tackle any job on today's farms.

Tractor service in the agriculture industry has increased dramatically over the past century thanks to their legendary ruggedness and durability. Because of their simple yet hardy design, many older tractors that feature manual transmissions are still in use. Unfortunately, these older transmissions are typically unsynchronized, meaning the tractor must be stopped before shifting gears, which can be very inconvenient. Modern tractors on the other hand use synchronized or continuously variable transmissions (CVT), which not only allows for better fuel efficiency but

also allows the CVT to shift through an unlimited number of effective gear ratios.

Today's tractors don't always follow the classic design, with two large rear wheels and two smaller front wheels. Over time, different configurations have been developed to suit the environment in which they are used. For example, in locations with wet or heavy soils, tractors typically use tracks (such as those found on a "Caterpillar" or tank) because of their superior traction. Other modern tractors feature four wheel drive, either with the classic configuration (two large, two small) or with four large wheels.

Tractor engines put out an enormous amount of power, but in order to be useful that power must be harnessed. That's where tractor hitches come in. They take the form of draw bars, fixed mounts or three-point hitches and quick hitches that allow power to be transferred from the engine to implements that are typically pulled behind or beside the tractor, and may include attachments such as plows, seeders, tillers, mowers and many others.

TEXT D

Поисковое чтение (Retrieving Reading)

FARM MACHINERY MAINTENANCE

1. Maintenance Activities

Good maintenance practices are essential for efficient operation of all types of farm machinery. Day-to-day maintenance and repair activities keep farm machinery and vehicles safe and reliable.

Maintenance involves fixing any sort of mechanical or electrical device should it become out of order or broken

Generally speaking, there are two types of maintenance in use: **Preventive maintenance**, where equipment is maintained before break down occurs. Preventive maintenance is effective in preventing age related failures of the equipment. **Corrective maintenance**, where equipment is maintained after break down. This mainte-

nance is often most expensive because worn equipment can damage other parts and cause multiple damage.

There are four strategies to achieve maximum farm machinery life. These strategies are: machinery maintenance, oil analysis, machinery storage, engine tune-ups.

Maintenance activities include lubrication, oil and filter changes, battery replacement, and repairs including light metal machining. **Lubrication** is needed because of friction. It increases engine life span, aids fuel efficiency and helps you get maximum performance from your vehicle. Lubricants are available in three forms: fluid oils, semisolids and solids.

Oil Analysis. A detailed look at a sample of engine, transmission or hydraulic oil is a valuable preventative maintenance tool. In many cases, it enables identification of a potential problem before a major repair is necessary and downtime during critical operations can be avoided. Oil analysis is a means of monitoring wear and oil contamination.

Machinery storage. Farmers must have a “good home” for the machinery when it is not working in the field. The first thing is to make sure that the machine is in good repair before you put it away. It must be kept clean, dry and lubricated. Equipment stored inside has a significantly higher trade-in value compared to the same equipment stored outside. Parts such as belts, tires and hoses deteriorate rapidly when unprotected. Machines, including tractors, combines, planters, drills should be kept inside.

Engine Tune-Ups. Diesel and gas engines require periodic tune-ups. Engines and hydraulic systems should be thoroughly warmed up periodically during periods of non-usage. A tune-up may include changing air and fuel filters, cleaning and adjusting injector nozzles, and adjusting engine timing.

2. Machinery Safety

It is important to be safety conscious when dealing with any job that requires the use of machinery.

To avoid any type of machinery-related injury strict safety prac-

tices must be employed.

-Never operate machinery under the influence of drugs or alcohol. The operator not only puts himself in danger but also anyone who may be working with them or in the general area.

- Protective clothing should be worn during the operation of farm machinery. Never wear baggy or loose fitting shirts or pants.

Machinery Repair

- All machinery should be maintained regularly. When repairs are done, the machine should be fixed according to manufacturers specifications.

- Brakes, hitches, safety chains, springs and shackles, should be inspected regularly for wear, broken or missing parts and cracks in the welds.

- Whenever preparing to work on a piece of equipment, wheels need to be blocked to prevent movement and any jacks used should be stable and in good condition.

2.3. Грамматический минимум

Grammar Revision

Инфинитив, формы инфинитива в действительном и страдательном залоге, функции инфинитива в предложении

1) *Инфинитив* – это неопределенная форма глагола, отвечающая на вопрос что делать? что сделать? Формальным признаком инфинитива является частица *to*, которая может отсутствовать после некоторых глаголов.

!!! **Запомните: инфинитив употребляется без частицы *to* после глаголов, выражающих:**

1. Чувства и эмоции, физическое восприятие, ощущение: to see, to hear, to feel, to watch,	We see the farmers use recent technological advances in agriculture.
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to notice, to observe	Мы видим, что фермеры используют последние технологические достижения в сельском хозяйстве.
2. Приказ, разрешение, побуждение, распоряжение: to make, to let, to cause, to have	He <i>made</i> the mechanic change the spark plug. Он распорядился, чтобы механик поменял свечу зажигания.
3. После модальных глаголов: can, may, must, should	The mechanical engineer <i>must</i> do this work. Эту работу должен выполнять инженер-механик.

Формы инфинитива

Группа Времен	Действительный залог	Страдательный за- лог
Simple (Indefinite)	<i>to use</i> He wants <i>to use</i> the new machinery. Он хочет использовать новую технику.	<i>to be used</i> The machinery <i>to be used</i> is new. Техника, которая будет использоваться, новая.
Continuous	<i>to be using</i> They seem <i>to be using</i> new machinery now. Кажется, они сейчас используют новую технику.	—
Perfect	<i>to have used</i> He seems <i>to have used</i> the new machinery this year. Кажется, он использовал новую технику в этом году.	<i>to have been used</i> The new machinery seems <i>to have been used</i> this year. Новая техника, кажется, использовалась в этом году

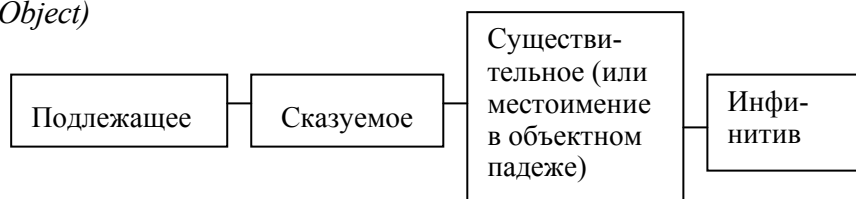
Perfect Continuous	<i>to have been using</i> He seems <i>to have been using</i> the new machinery for 2 years. Кажется, он использовал новую технику в течение двух лет.	—
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Функции инфинитива в предложении

Функция	Перевод
1. Подлежащее (subject)	<i>To read</i> the operator's manual is necessary. <i>Необходимо ознакомиться</i> с инструкцией по эксплуатации.
2. Часть составного сказуемого (predicative)	His aim is <i>to enter</i> the Belarusian State Agrarian Technical University. Его цель – <i>поступить</i> в Белорусский государственный аграрный технический университет.
3. Дополнение (object)	He is ready <i>to read</i> the text. Он готов <i>читать</i> текст.
4. Определение (attribute)	The decision <i>to replace</i> an item of farm machinery can be made for several reasons. Решение <i>заменить</i> часть сельскохозяйственного оборудования принимается по нескольким причинам.
5. обстоятельство (adverbial)	He came here <i>to study</i> driving a car. Он приехал сюда, чтобы <i>научиться</i> водить машину.

Инфинитивные обороты: Complex Object, Complex Subject

Объектный предикативный инфинитивный оборот (Complex Object)



He wants *the mechanic (him)* to repair the car.

Он хочет, чтобы механик (он) починил машину.

Объектный предикативный инфинитивный оборот употребляется после глаголов, выражающих:

1. Желание, потребность: to want, to wish, to desire, to like, to intend, would like, need, to dislike, to hate	We <i>want</i> him to repair the car. Мы хотим, чтобы он починил машину.
2. Умственную деятельность: to expect, to prove, to know, to think, to find, to understand, to consider, to believe, to suppose	We <i>think</i> the new machinery to be used on the farm. Мы считаем, что новая техника будет использоваться на ферме.
3. Чувства и эмоции, физическое восприятие, ощущение: to see, to hear, to feel, to watch, to notice, to observe	We <i>see</i> the new machinery be used on the farm. Мы видим, что новая техника используется на ферме.
4. Приказ, разрешение, побуждение, распоряжение: to make, to let, to permit, to ask, to tell, to order, to command, to cause, to force, to have	He <i>made</i> the mechanic repair the car. Он распорядился, чтобы механик починил машину.

!!! Инфинитив в объектном инфинитивном обороте часто используется в страдательном залоге, в особенности с глаголами, выражающими приказ, разрешение, побуждение:

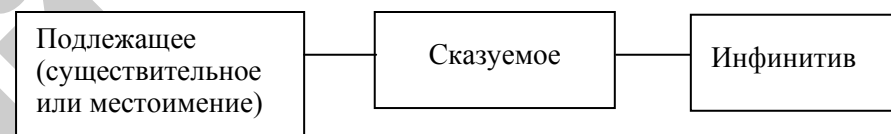
На русский язык предложения со страдательным залогом могут переводиться с использованием действительного залога, который ставится перед существительным.

He wants the new machinery *to be used*.

Он хочет *использовать* новую технику.

Он хочет, чтобы использовалась новая техника.

Субъектный предикативный инфинитивный оборот (Complex Subject)



The new machinery (it) is known to be of good quality.

Известно, что новая техника (она) хорошего качества.

!!! Инфинитив в субъектном предикативном инфинитивном обороте может употребляться во всех группах времен и формах залогов и обозначать:

1) действие, происходящее одновременно с главным	He <i>is said to use</i> the new machinery. Говорят, (что) он <i>использует</i> новую технику.
2) действие в процессе его совершения	The house <i>seems to be building</i> now. Кажется, (что) дом <i>строится</i> сейчас.
3) действие, предшествующее действию, выраженному сказуемым	He <i>seems to have done</i> the report this year. Кажется, (что) он <i>делал</i> отчет в этом году.

!!! При переводе предложений, содержащих инфинитив в субъектном предикативном инфинитивном обороте, всегда начинайте переводить предложение со сказуемого:

He *is said* to use the new machinery.

Говорят, что он использует новую технику.

2.4. Задания для самоконтроля по грамматике

1) Какие неличные формы глагола вы знаете? Для образования каких временных групп они уже употреблялись?

2) Дайте описание инфинитива как одной из неличных форм глагола.

3) а) Назовите формы инфинитива действительного залога всех групп времен, образованные от следующих глаголов русского языка: *пахать, удобрять, дисковать, бороновать, убирать урожай, улучшать, сеять, сажать*. При необходимости, обращайтесь к таблице форм инфинитива и активному словарю модуля.

б) Назовите формы инфинитива страдательного залога всех групп времен, образованные от следующих глаголов русского языка: *пахать, удобрять, дисковать, бороновать, убирать урожай, улучшать, сеять, сажать*.

4) Какие функции инфинитив выполняет в данных предложениях?

a) To prepare the soil is very important.

b) He began to harvest.

c) He went to London to take part in the exhibition of farm machinery.

d) He was the first to plant potatoes.

e) We are ready to seed crops.

5) Какие инфинитивные обороты вы знаете? Чем они похожи и чем отличаются?

3. УЧЕБНО-МЕТОДИЧЕСКИЕ МАТЕРИАЛЫ К ПРАКТИЧЕСКИМ ЗАНЯТИЯМ

3.1. Учебно-методические материалы к тексту А

Text-Based-Assignments

Language Study

Методические рекомендации

Для успешного выполнения упражнений данного раздела вам необходимо усвоить лексический минимум по теме, уметь переводить речевые тематические модели и использовать их в речи. Это понадобится вам также для глубокого понимания текста А и последующего обсуждения его на английском языке.

Тренировочные задания распределены по трем уровням сложности (А, В, С), что поможет проверить и оценить глубину и качество усвоения материала. Они отражают современный подход к оценке знаний, умений и навыков по иностранному языку. Максимальная оценка знаний на первом уровне (А) - 6 баллов, на втором (В) - 8 баллов, на третьем (С) - 10 баллов.

(A) Exercise 1. Guess the meaning of the following international words.

Method, farmer, disk, machine, physical, component, cultivation, cultivator, sprayer, tractor, primitive, to compact, to crush, to prevent, principal, production, to classify, granular, deficient, element, class

(A) Exercise 2. Remember some common prefixes and suffixes and their meaning.

Noun		
PREFIXES:	SUFFIXES:	
<i>ab</i>	<i>-an (ian)</i>	<i>-ess</i>
<i>anti</i>	<i>-ance</i>	<i>-ion (tion, -ation)</i>
<i>co</i>	<i>-ant</i>	
<i>dis</i>	<i>-dom</i>	<i>-ist</i>
<i>extra</i>	<i>-eer</i>	<i>-ity</i>
<i>in (il-, im-, ir-)</i>	<i>-ence</i>	<i>-ment</i>
<i>mis</i>	<i>-ent</i>	<i>-ness</i>
<i>non</i>	<i>-er</i>	<i>-or</i>
<i>post</i>		
<i>semi</i>		

Verb		
PREFIXES:	SUFFIXES:	
<i>sub</i>	<i>-ate</i>	<i>-fy (-ify)</i>
<i>un</i>	<i>-en</i>	<i>-ize</i>

Adjective; Adverb		
PREFIXES:	SUFFIXES:	
<i>sub</i>	<i>--able</i>	<i>-ical</i>
<i>un</i>	<i>-al</i>	<i>-ish</i>
	<i>-an (ian)</i>	<i>-ive</i>
	<i>-ary</i>	<i>-less</i>
	<i>-ful</i>	<i>-ly</i>
	<i>-ial</i>	<i>-ous</i>
	<i>-ibley</i>	<i>-y</i>

a) Mark the root, the prefix or suffix in the following words: *farmer, principal, classify, cultivation, misconception, unusual*.

What part of speech are these words?

b) Find 5 derivatives in the text. Mark the root, the prefix or the suffix in each derivative. What words are they derived from?

Model: *equipment(n)=equip(v)+ment*

(B) Find as many as possible derivatives in the text. Mark the word parts of these words and define their root word.
improve(v)=im+prove

(A) Exercise 3. Match the words to create collocations from the text. translate them into Russian.

1. agricultural	A. tractor
2. wheeled	B. fertilizers
3. wide	C. advantage
4. tillage	D. equipment
5. liquid	E. range
6. great	F. crops
7. heavy	G. implements
8. grain	H. loads

(A, B) Exercise 4. Define the correct meaning for each of the following words as it is used in the text. Be ready to tell what context clues helped you make your choice.

a)

- 1) range - (a) ряд; (b) сфера; (c) предел
- 2) machinery - (a) механизмы; (b) аппараты; (c) машинное оборудование
- 3) device- (a) план; (b) приспособление; (c) способ
- 4) equipment- (a) оборудование; (b) техника; (c) состав
- 5) principal- (a) основной; (b) ведущий; (c) принципиальный
- 6) crop - (a) масса; (b) с/х культура; (c) обилие

b)

- 1) tillage - (a)arable land; (b)preparation of soil for planting; (c)plowed field
- 2) device - (a) plan; (b) implement; (c) means
- 3) attachment- (a)device; (b)devotion; (c) fastening
- 4) penetrate - a) go through; (b) overtake; (c) perceive
- 5) embrace- a)include; b)penetrate; c)choose
- 6) pull- (a)tow; (b)lay; (c)drag

(B) Exercise 5 Translate the infinitive constructions.

Different machinery to plow, many kinds of plows to improve the physical conditions of the soil, harrows to stir the soil, cultivation machinery to consolidate the soil, spreaders to apply manure, sprayers to apply fertilizers in liquid form, mowers to make hay, beet harvesters to harvest beets, tractors to pull many kinds of implements, wheeled tractors to do general farm work

(B) Exercise 6. Give the Russian equivalents to the following expressions.

Убирать урожай без потерь; преобразовывать силу в работу; проникать очень глубоко; проход техники; специальные условия; кормовые культуры; приспособления для посадки; иметь преимущество; почвы, страдающие от недостатка питательных веществ.

(B) Exercise 7. Match the words to create collocations from the text. Translate the Russian words into English and the whole word combinations into Russian.

1. to apply	A. сорняки
2. дробить	B. seedbed
3. to sow	C. сено
4. ГОТОВИТЬ	D. the clods
5. to make	E. семена
6. выравнивать	F. into the depths
7. to eliminate	G. удобрения
8. проникать	H. the ground

(B) Exercise 8. Insert the appropriate prepositions from the list below and translate the sentences into your native language.

into	for	in	on	down	for
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1. Wheeled tractors are used ___ general farm work.

2. Crawlers have the great advantage that they can be available ___ heavy loads ___ any class of land.

3. Agricultural implements and machines may be divided ___ 4 main groups.

4. Applying fertilizers is necessary where soils are deficient ___ plant food elements.

5. Cultivation machinery is used to break ___ the soil before or after a crop is sown.

(B) Exercise 9. Complete the sentences with the words given in the box.

power-operated, designed, range, implements, harrow, crops

1. Today a wide _____ of machinery can be used on a farm.

2. Agricultural _____ and machines can be divided into four main groups.

3. A _____ is an implement used to level the ground and crush the clods.

4. There are several types of cultivators _____ for special crops and conditions.

5. Planting equipment is any _____ device introduced to place seeds or plant parts.

6. _____ are harvested by different kinds of harvesting equipment.

(C) Exercise 10. Translate into Russian paying attention to the underlined words.

1) The secondary tillage equipment used by the farmer includes harrows, rollers etc.

2) We used cultivation machinery to break down the soil before a crop is sown.

3) The device is to place seeds in the soil.

- 4) Agricultural implements and machines occupy an important *place* on the modern farm.
- 5) My friend *works* at the Minsk tractor *works*.
- 6) The layers of soil have become *compacted*.
- 7) Heavy machinery *compacted* the soil greatly.

(C) Exercise 11. Use the word given in capitals at the end of each line to form a word that fits in the space in the same line.

1. This large agricultural enterprise has a wide range of _____ in its disposal.	MACHINE
2. _____ implements and machines may be designed for different tasks.	AGRICULTURE
3. Beet _____ are used to harvest beet.	HARVEST
4. Tractors are divided into two main 4 groups: _____ and crawlers.	WHEEL
5. Many kinds of harvesting _____ are used for crop harvesting.	EQUIP

Text Study

(A) Exercise 1. Read the text and make up sentences according to the information from the text.

sub-soiler; row-crop planter; harrow; drill; manure spreader; digger; fertilizer; distributor; roller; rake; tool for mulching and fallowing ; tractor; planter; sprayer; thinner; broad-cast cultivator; plow; baler.

Tillage equipment	to consist of	1. row-crop planter, drill, broad-cast cultivator
Planting equipment	to embrace	2. manure spreader, fertilizer, distributor, sprayer, plow

Fertilizing equipment	to include	3. digger, rake, baler, tractor
Harvesting equipment	to be classified as	4. sub-soiler, harrow, roller, tool for mulching and fallowing

(A) Exercise 2. Choose the correct answer.

1. What is the aim of tillage?
 - a. to cultivate
 - b. to prepare the soil
 - c. to harvest
2. What is a plow designed for?
 - a. making the soil more fertile
 - b. preparing the suitable seedbed
 - c. placing seeds
3. How many components does a plow have?
 - a. 4
 - b. 7
 - c. 6
4. What is a bean cultivator designed to?
 - a. to cultivate beets
 - b. to cultivate beans
 - c. to cultivate weeds
5. What can a tractor pull?
 - a. many kinds of implements
 - b. food crops
 - c. feed crops

(B) Exercise 3. Complete the sentences with the appropriate ending according to the text and translate them into your native language.

- 1) Today the farmer has many agricultural implements to... .
- 2) The machine is a device... .
- 3) Ploughs are divided into... .
- 4) The principal parts of a plow are... .
- 5) Cultivators are designed for

- 6) To make hay ...
- 7) To harvest beet ...
- 8) To pull many kinds of implements ...
- 9) To do general farm work ...

(B) Exercise 4. Look through the text again to define whether the following statements are true or false. Correct the false ones.

- 1) There is a wide range of machines to plant.
- 2) Agricultural implements may be divided into several groups.
- 3) To prepare the soil for harvesting is the aim of tillage.
- 4) A harrow is designed to eliminate weeds.
- 5) After a crop is sown, fertilizing equipment is used.
- 6) Planting equipment is used to place seeds in the soil.
- 7) When soils are deficient in plant food elements, many types of fertilizers are applied.
- 8) There are diggers to harvest all types of seed crops.
- 9) A beet harvester is the most important machine on the farm.
- 10) Wheeled tractors are available for heavy loads.

1) Find in the text and using the key words give in writing the main information about:

a) Cultivating machinery.

Key words: to break down, to sow, to cover, cultivator, rod weder, sub-soil, chisel.

b) Fertilizing equipment.

Key words: applying of fertilizers, manure spreader, distributor, sprayer.

c) Harvesting equipment.

Key words: to harvest, to make hay, mover, rakes, balers, combine harvester.

2) Divide the text into several parts. Find the key sentences in each part.

(C) Exercise 6. Explain the difference between:

- a) the primary tillage equipment and the secondary tillage equipment;
- b) cultivation machinery and planting equipment;
- c) fertilizing equipment and harvesting equipment;
- d) grain drills and row-crop planters;
- e) combine harvesters and diggers;
- f) wheeled tractors and track-laying tractors.

(C) Exercise 7

a) Find English equivalents to the Russian words.

b) Put the words into the right order to make correct sentences.

1. Цель; is; оборудование для первичной обработки почвы; of; the soil; to prepare; planting; for.

2. Выравнивать почву, used, a harrow, дробить комья земли, an, is, приспособление, and.

3. Any, is, introduced, for production of, to place, автоматическое устройство для посадки, food and feed, seeds, or, parts, in or on, the soil; crops.

4. Культуры, by, the use, harvested, уборочные машины, are, of, all, many kinds of, for, types, культуры.

5. Опрыскиватели, such, are, in, fertilizing, equipment, as, distributors, навозоразбрасыватели, use; today.

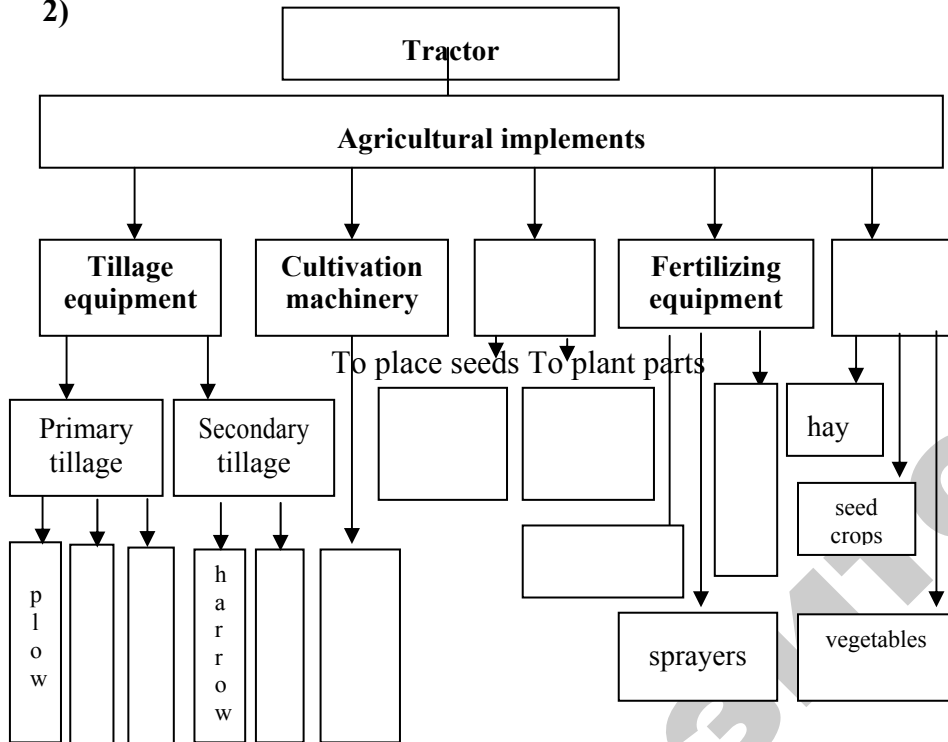
Discussion

(A) Exercise 1. Complete the diagram and the table.

1)

Agricultural operations:	sowing, ...
Agricultural crops:	wheat, beans, ...

2)



(A) Exercise 2. Give the information about the functions of all groups of agricultural machinery. You may use the diagram from ex.1

(B) Exercise 3. Compare the functions of:

- a) plows and sub-soilers
- b) grain drills and bean cultivators

- c) granular distributors and sprayers
- d) combine harvesters and diggers

(B) Exercise 4. Make up a plan of the text A. Sum up the information from the text according to your plan using the following expressions:

1. The text under consideration is head-lined ...
2. The text under discussion presents an outlook of...
3. The purpose of the text is to give the reader some information about...
4. The text can be divided into ... parts.
5. The first part reviews some common information ...
6. The second part deals with...
7. The third part touches upon...
8. The fourth part of the text includes...
9. The text highlights...
10. According to the text...

(B) Exercise 5. Discuss and provide answers to the following questions. (Work in pairs or it may be a group work.)

- 1) What agricultural operations is farm machinery known to perform?
- 2) What is a machine ?
- 3) How many groups may agricultural implements and machines be divided into?
- 4) What equipment can be used for tillage?
- 5) What is a plow designed for?
- 6) What kinds of plows do you know?
- 7) What are the principal kinds of harrows?
- 8) What is planting equipment designed for?
- 9) What equipment helps farmers to apply fertilizers?
- 10) What machinery is required for harvesting?

(C) Exercise 6. Develop the following situations.

1. You have to take your exam in Farm Machinery. Your groupmate seems to be confused. Help him to understand the func-

tions of different types of agricultural implements and machines used on the farm.

2. Suppose you have to deliver a presentation about the means of improving soil fertility at a conference. Share your ideas with your groupmates.

3. You don't know anything about cultivation machinery. Your groupmate (groupmates) is ready to help you. Ask him (them) your questions. Role-play the dialogue on the situation.

3.2. Учебно-методические материалы к тексту В

LANGUAGE STUDY

(A) Exercise 1. Translate the following words and phrases into your native tongue.

At a slow speed, multi-purpose farm vehicle, harrowing, steam-powered portable engines, gasoline-powered tractors, maintenance, auto-steer systems, internal combustion engines, gasoline tractor, automatic temperature controls, wheeled tractors, row-crop tractors, initial cost, outweigh this advantage.

(A) Exercise 2. Make sure you know the English equivalents for the following:

Type of vehicle, tractive effort, for particular uses, great advantage, providing power supply, efficient type, crawler, a great number of days per year, a common misconception.

(B) Exercise 3. Complete the sentences with the correct verb.

push,	rotate,	turn,	depress,	press
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1. When you ... this wheel clockwise the tractor turns to the right.

2. When you ... accelerator pedal the tractor goes slowly
3. When you ... the horn the tractor makes a sound signal.
4. When you ... the brake pedal the tractor stops.
5. When you ... the key clockwise the engine switches on.

(B) Exercise 4. Many compounds mean exactly what you would expect them to mean if you combine the definitions of their separate words. Explain the compounds below. Translate them into Russian.

Farm machinery; wheeled tractor; track-laying; multi-purpose; steam-powered engine; gasoline-powered machine; row-crop tractor; internal combustion engine.

(B) Exercise 5. Make up the pairs of synonyms.

1. evolve	A. supply
2. tow	B. benefit
3. maintenance	C. service
4. provide	D. aim
5. implement	E. track-laying tractor
6. multitude	F. equipment
7. crawler	G. economical
8. advantage	H. develop
9. purpose	I. great number
10. efficient	J. haul
11. machinery	K. main
12. general	L. device

(B) Exercise 6. Make use of the prepositions from the list.

with	of	on	from	in
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1. Tractors are also usually associated __ farm machines and general farm use.

2. The word tractor was taken ___ a Latin word that means “to pull”.

3. The steam-powered engines were ___ use until the onset of the 20th century.

4. The crawler is a more efficient type ___ a tractor.

5. Tractors may be used not only ___ the farms.

(C) Exercise 7. Use the word given in the brackets at the end of each line to form a word that fits in the gap in the same line.

1. ___ of the tractor includes devices and assemblies. (construct)

2. Farm tractors first made their _____ in the 19th century. (appear)

3. A ___ of specialty farm tractors has been developed for particular uses. (vary)

4. ___ tractors are subdivided into standard and row-crop types. (wheel)

5. There is a common _____ that tractors can only be found on farms. (conception)

6. The great _____ of crawlers is their initial cost. (advantage).

(C) Exercise 8. Correct any errors in these sentences. Some sentences contain no errors.

1. A variant of specialty firm tractors have been depended for particular uses.

2. Row-group tractors can be used for all ordinary purposes.

3. The oil powered engines were in use until the onset of the 20th century.

4. Tractors offer a lot of use and convenience for many people.

5. Farm tractors first made their appearance in the 19th century.

6. Farm tractors are used to carry on different agricultural tasks.

7. Crawlers are more economic in fuel.

8. Small tractors from 1 to 10 hours-power may be used for garden and orchard work.

9. Farm tractor is a distinctive multi-purpose farm vehicle.

10. The crawler is, moreover, the more efficient type of tractor and, however, can go on the land earlier after rain so can work a greater number of days per year.

TEXT STUDY

(A) Exercise 1. Choose the correct variant.

I

1. Farm tractors first made their appearance in the (nineteenth/seventeenth) century.

2. (Crawlers/wheeled tractors) work a greater number of days per year.

3. (Wheeled tractors/crawlers) may be subdivided into standard and row-crop types.

II

1. The steam powered engines were in use until the onset of the 20th century, when they were replaced by more reliable (cabs/internal combustion engines/steam engines).

2. The earliest tractors had (steam-powered/gasoline/petrol) portable engines.

3. The word tractor was taken from a Latin word that means (to pull/to plow/to crush).

III

1. Modern tractors use a power take-off shaft to provide rotary power to (plows/cabs/wheels/machinery).

2. Tractors are special vehicles which are aimed to provide the (hauling/plowing/driving/repairing) of trailers.

3. The steam-powered portable engines were followed by (oil-burning/water-burning/steam-burning/lubricant-burning) and then gasoline-powered tractors.

(A) Exercise 2. Match the questions with their answers.

1. What is a tractor?	A. In the 19 th century.
2. What are tractors aim to do?	B. Into wheeled and crawlers
3. When did first farm tractor appear?	C. Standard and row-crop types
4. How can farm tractors be divided?	D. To provide the hauling of trailers and other types of machinery
5. How may wheeled tractors be divided into?	E. Crawler
6. What kind of tractor is more efficient?	F. Not so. Some tractors have specific uses.
7. Do tractors work only on farms?	G. A type of vehicle that is constructed to deliver a tractive effort at a slow speed.

(B) Exercise 3. Complete the following sentences according to the text.

1. Farm tractors are used to carry out different agricultural tasks....
2. The word “tractor” was taken...
3. Farm tractors first made their appearance...
4. Farm tractors may be divided into two groups: ...
5. Wheeled tractors may be subdivided into...
6. Row-crop tractors can be used...
7. Farm tractors are used...
8. Modern tractors may have...

(B) Exercise 4. Say if the statements are true or false . Correct the false ones according to the text.

1. Row-crop tractor can be used for all ordinary purposes.
2. Farm tractors first made their appearance in the 18th century.
3. The gasoline engines were in use until the onset of the 20th

century.

4. A farm tractor is a distinctive, multi-purpose farm vehicle.
5. Wheeled tractors can be used for heavy loads and can work on almost any class of land.
6. Crawlers may be subdivided into standard and row-crops types.
7. The crawler is the more efficient type of tractors.
8. The earliest tractors were steam-powered portable engines.
9. Tractors are special tools which are aimed to perform different tasks.
10. Tractors can be used only on a farm.

(B) Exercise 5.

- a. Divide the text into parts. Find the key sentences in each part and define the topic.
- b. Make up a plan of the text and write down the key words to each point of the plan.

(B, C) Exercise 6. Provide more information. Elicit it from the text.

1. A farm tractor is a distinctive multi-purpose farm vehicle.
2. Farm tractors first made their appearance in the 19th century.
3. Farm tractors are divided into two main groups.

(A, B, C) Exercise 7. Share the information from the text “Tractors” with your partners.

- (A) – 5-6 sentences
- (B) – 7-10 sentences
- (C) – 10- 15 sentences

DISCUSSION

(A) Exercise 1.

- a. Complete the table.

Types of Tractors

Farm Tractors
1.
2. Wheeled

Wheeled Tractors
1. Standard
2.

b. Answer the following questions. You may use the table above as a support.

1. What is a tractor?
2. What are tractors usually associated with?
3. What is a farm tractor?
4. When did the first farm tractors make their appearance?
5. What groups may farm tractors be divided into?
6. What are standard wheeled tractors used for?
7. What tractors can be used for heavy loads on almost any class of land?
8. What tractors are more economical in fuel?
9. What is the more efficient type of tractor?

(B) Exercise 2. Compare the function of:

- a) wheeled tractors and crawlers
- b) standard and row-crop types
- c) standard and small tractors from one to ten h.p. with single cylinder

(B) Exercise 3. Provide the information about the different types of tractors.

(A, B, C) Exercise 4. Describe the specific use of different types of tractors. Pay special attention to the farm tractors. Compare your answers with other students.

(B, C) Exercise 5. Compare the functions of different types of tractors. Elicit the information from the text. Be ready to report back to the class.

(B, C) Exercise 6. Give detailed information about farm tractors. Prove their importance on the farm.

(C) Exercise 7. Suppose you have to deliver a lecture on the evolution of a tractor. Present your outlook of innovative features in modern tractors.

(C) Exercise 8. Suppose you are a farm manager. You run an average-sized farm and you have the possibility to buy only three tractors. What types of tractors would you choose. Explain why.

(C) Exercise 9. Make up a dialogue according to the situation.

Student A is a sales manager of agricultural machinery. Student B wants to purchase a tractor and must find out all the information about the types of tractors, their function, the tasks they perform and their specifications.

3.3. Учебно-методические материалы к тексту С

Text-Based-Assignments.

Language Study

Text-Based-Assignments.

(A) Exercise 1. Read these words and word combinations.

traction	тяга, тяговое усилие
wheel	колесо
engine	двигатель

internal	внутренний
run on diesel	работать на дизельном топливе
tackle	справляться
transmission	трансмиссия
durability	прочность
fuel	топливо
track	гусеница, трак
hitch	сцепка
gear	передача
be harnessed	быть выработанным
fixed	закрепленный
transfer	передавать

(A) Exercise 2. Without reading the text guess what the text is about.

- a) farm machinery
- b) combine harvester
- c) main components of a tractor

(A) Exercise 3. Read the text and say

- What abstract - deals with трансмиссией
- includes the information about двигателях
 - touches upon видов сцепки
 - presents колеса и гусеницы

Start with:

the first abstract	
the second abstract	
the third abstract	
the fourth abstract	

(A) Exercise 4. Read the text and choose the right answer according to the information from the text.

1. What is the heart of any tractor?
 - a) hitch
 - b) wheel/track
 - c) engine
2. What do tractors use in locations with wet or heavy soils?
 - a) tracks
 - b) engine
 - c) transmission
3. Why must the tractor be stopped before shifting gears?
 - a) because of synchronized transmission
 - b) because of unsynchronized transmission
 - c) because a number of gear ratios
4. What do hitches allow a tractor to do?
 - a) to use tracks
 - b) power to be transferred from the engine to implements
 - c) to move

(B) Exercise 5. Find and mark the key-words connected with the main information in each abstract of the text.

(B) Exercise 6. Say whether the statements are true or false. Correct the false ones.

1. Tractors don't fill many roles on today's farms.
2. The engine is the lungs and soul of any tractor.
3. When they were first invented, tractors used steam engines.
4. Since the 20th century tractors have used internal combustion engines that run on a variety of fuels.
5. Most modern tractors today run on diesel and biodiesel.
6. Tractor service in the agriculture industry has increased dramatically over the past century.
7. Unfortunately, these older transmissions are typically unsynchronized, meaning the tractor must be stopped after shifting gears.

8. Modern tractors on the other hand use synchronized or continuously variable transmissions (CVT).

9. Today's tractors always follow the classic design, with two large rear wheels and two smaller front wheels.

10. Tractor engines put out an enormous amount of power, but in order to be useful that power must be harnessed.

(B) Exercise 7. Elicit key-sentences which help to express the main idea of the text. Offer your title of the text.

(B) Exercise 8. Put the sentences in logical order according to the text.

1. The engine is the heart and soul of any tractor..
2. Tractor hitches take the form of draw bars, fixed mounts or three-point hitches and quick hitches..
3. Modern powerful engines typically range in size from 18 to 575 horsepower. .
4. For example, in .locations with wet or heavy soils ,tractors typically use track, because of their superior traction
5. Modern tractors use synchronized or continuously variable transmissions.
6. They allow power to be transferred from the engine to implements.
7. It allows for better fuel efficiency.
8. Over time, different configurations of wheels have been developed to suit the environment in which they are used.

(B) Exercise 9. Answer the following questions.

1. What roles do modern tractors play on today's farm?
2. What did tractors use when they were first invented? Was that safe?
3. When did tractors start using internal combustion engines?
4. What do modern tractors run on?
5. Why do many older tractors that feature manual transmis-

sions are still in use?

6. Do today's tractors always follow the classic design?

7. What allows power to be transferred from the engine to implements that are typically pulled behind or in front of the tractor?

(A, B, C) Exercise 10. Make up a plan of the text in a form of:

- a) (A) key-words
- b) (B) key-sentences
- c) (C) questions

(B) Exercise 11. Make up a summary of the text answering the following questions in written form.

1. What is the title of the text?
2. Is the purpose of the text to give the reader some special information about main components of a tractor?
3. How many parts does the text consist of?
4. What does the first part present?
5. What does the second part deal with?
6. What does the third part touch upon?
7. What does the fourth part include?

(B, C) Exercise 12. The text has an introduction but doesn't have any conclusion. Can you make the conclusion based on the information from the text. You may use the following phrases to make your speech:

In conclusion, ...

The author comes to the conclusion that ...

We can make the conclusion according to the text that ...

for (B) – 2-3 sentences

for (C) – 4-6 sentences

(B, C) Exercise 13. Express your opinion about the text. You may start with the phrases given below.

I found the text interesting (useful, informative) ...

I think (believe, should say, consider) ...

In my opinion ...

To my mind ...

It seems to me ...

From my point of view ...

for (B) – 2-3 sentences

for (C) – 4-6 sentences

(C) Exercise 14. Express your attitude to the text in your own words. Say what information from the text you consider the most interesting and useful. Why?

(C) Exercise 15. Make a short summary of modern components of tractors compared to older ones.

(C) Exercise 16. Suppose you are delivering a lecture on the latest innovations in main components of the tractor. You have to feature all the components.

(C) Exercise 17. Suppose you have to cover the topic of the main components of modern tractors at the agricultural conference. Prepare your speech. Be ready to report back to your partner.

3.4. Учебно-методические материалы к тексту D

(A) Exercise 1. Read the title of the text and try to guess what it is about.

(A) Exercise 2. Read the first paragraph of the text and say what questions are discussed in it.

(B) Exercise 3. Scan the text. Focus on the general ideas of each part to say how they are connected and why.

(B) Exercise 4. Think of the alternative way to entitle each part.

(B, C) Exercise 5. Extend the following statements.

For (B) – 1-2 sentences

For (C) – 3-4 sentences

1) Agricultural implements and machines need day-to-day maintenance and repair activities.

2) Farm machinery maintenance and repair may result in environmental pollution.

(A, B, C) Exercise 6. State what you have learned from the text about:

a) 1) Maintenance activities.

2) Strategies to achieve maximum farm machinery life

3) Lubrication

4) Oil filter

5) Oil analysis

6) Machinery storage

(B, C) b) Promote theses to the text.

for (B) – 4-6 sentences

for (C) – 6-10 sentences

(B) Exercise 7. Look through the text again. Write down a concise summary. You may use the following expressions:

The text presents an outlook of...

The text gives information about...

The text highlights...

The text encapsulates...

The expresses the main idea of...

The text wraps up ...

The importance of ... is emphasized in the text.

The target reader of the text ...

The text is addressed to...

The text is of interest to...

The text is instructive to...

(C) Write down an expanded summary. Express your attitude to the text. Derive a conclusion. Elicit the information from the text and use additional information from your general knowledge of the subject or any other source of information that is coherent to the subject of farm machinery maintenance.

3.5. Учебно-методические материалы по грамматике

Grammar revision

The Infinitive

(A) Exercise 1. Find the infinitives in these sentences. Translate the sentences.

1) The purpose of the test is to collect data that can be used to assess the performance of tractors of different makes and models.

2) To enhance the quality of life of rural and urban people it is necessary to provide programs focused on human activity, food, fiber and natural resource systems.

3) For the computer system to operate, computer programs are required.

4) The purpose of the dynamometer is to apply varying loads through the PTO and to measure the power generated by the tractor.

5) The soil is bad to cultivate.

(A) Exercise 2. Complete the table with the appropriate form of the infinitive.

Tense form	Active voice	Passive voice
<i>Simple</i>	To supply, to apply, to increase, to produce, to harvest, to plow, to thresh, to till, to mount, to improve	
<i>Continuous</i>		
<i>Perfect</i>		

(A) Exercise 3. Choose the right variant. Translate the sentences.

1) We decided *to get/ get* our education at the Belarusian State Agrarian Technical University.

2) Agriculture can *provide/ to provide* us with many products.

3) Using the Internet farmers may *use/ to use* of data provided by agricultural colleges or other information centers.

4) If I were an engineer I would *to design/ design* tools.

5) They prepare students *to do/do* specific jobs.

(B) Exercise 4. Open the brackets using the infinitives. Translate the sentences.

1) There are good facilities (study) at the university.

2) Do you consider these species (grow) for many centuries?

3) The chairman ordered the field (plow).

4) They must (work) in the garden now.

5) They are said (be) at the agricultural exhibition in London last month.

(B) Exercise 5. Join the following pairs of sentences using the infinitive. What is the function of infinitives in all these sentences?

1) The students carry out research work in different student's

groups and societies. They want to be better prepared for work in industry.

2) Wind, water and animals were used. They provided energy for various devices.

3) They study a lot of subjects. They want to have a basic knowledge of the sciences.

4) Tractors, lorries and other machinery permit it. The time required for agricultural work is reduced.

(B) Exercise 6. Put the words into the right order to get sentences with the infinitive as a:

a) Subject

Me, gives, to study, at, the Belarusian State Agrarian Technical University, it, pleasure.

b) Adverbial modifier

To increase, they, fertilizers, the quality of, in the yield of the grain, improve.

c) Attribute

To rest, to work, I, a desire, at the University, and, here, have.

d) Predicative

Use of chemicals, cause, to, can, the environment, improper, damage.

e) Object

To operate, is, the implement, easy.

(C) Exercise 7. Group the sentences according to the functions of the Infinitive. Translate the sentences.

1) To increase the yields collective farmers must use fertilizers.

2) The aim of science and technology is to help make agriculture more productive.

3) Agriculture uses areas of land to produce food, clothing, shelter.

4) All farms have to introduce better crop rotation systems.

(C) Exercise 8. Translate into English.

1) Обрабатывать этот участок (земли) очень трудно.

2) Чтобы повысить урожай, нужно применять удобрения.

3) Этот механизм слишком устарел, чтобы его использовать.

4) Очень важно использовать современное оборудование в сельском хозяйстве.

The Complex Object. The Complex Subject.

(A) Exercise 1. Translate the sentences paying special attention to the use of the Complex Object and Complex Subject.

1) GPS Guidance Systems applications is known to provide a means to precisely apply pesticides, lime, fertilizers, and track wide planters and drills.

2) We know plants to provide us with food, clothing, shelter and many other things.

3) The farmer wants the crop to be sown earlier this spring.

4) This company is said to be the leading supplier of spraying machinery.

5) We make academically motivated students become innovative professionals.

(A) Exercise 2. Fill in the blanks with the particle "to" where necessary and translate the sentences into your native tongue.

1) The University educates students ... understand and ... sustain the integrity of the ecosystem as both specialists within their defined fields and well-informed citizens.

2) Our aim is sure ... provide students with strong, well-rounded academic backgrounds and agricultural degrees.

3) They are said ... be leading the agriculture industry into the future with a blend of new technology and energy.

4) We aim ... be globally recognized as a center of excellence in applied sciences in the field of agriculture through responsive scholarship, leadership and service to others.

(A) Exercise 3. Point out which sentence fits to the English equivalent.

«We know the harrow to be used for eliminating weeds».

- 1) Мы знаем об использовании плуга.
- 2) Мы знаем, что плуг используется.
- 3) Мы знаем, что плуг используется для удаления сорняков.
- 4) Мы хотим, чтобы плуг использовался для удаления сорняков

(B) Exercise 4. Complete these sentences so that the meaning is similar to the first sentence.

1) I was surprised that he was studying at the Belarusian State Agrarian Technical University.

I did not expect ...

2) Don't stop him applying fertilizers where soils are deficient.

Let ...

3) When you till the soil, it helps you keep the soil loose and free from weeds.

Tillage makes...

4) I think several types of cultivators should be used for special crops and conditions.

I want ...

(B) Exercise 5. Use one of the verbs to complete the sentences, translate them into Russian. Find the Complex Object in each sentence.

to buy, to give, to be (2), to see, to use, to meet

1) I know terms work, force, and power ... in mechanical engineering.

2) We know the rate of doing work ... in terms of horsepower, often abbreviated hp.

3) We know the force ... an effort that results in physical change.

4) They would like them ... the latest achievements in farm machinery.

5) He would be glad them ... these engineers at the railway station.

6) Do you believe modern science ... without modern technology?

7) I would like him ... some disc plows for our farm.

(C) Exercise 6. Translate the sentences into English paying attention to the use of the Complex Object.

1) Студенты наблюдали, как ремонтировали комбайн.

2) Я знаю, что он квалифицированный инженер.

3) Я хочу, чтобы вы поговорили с инженером по охране труда.

4) Мы знаем, что он учится на факультете "Технический Сервис".

The Complex Subject

(A) Exercise 1. Translate the sentences, paying special attention to the use of the Complex Subject.

Model: *These ploughing methods are considered to be satisfactory.* Считают, что эти методы плужной обработки удовлетворительны.

1) Farm equipment mechanics are considered to maintain, repair and install machines used in agriculture.

2) Under these conditions wheat is likely to grow well.

3) A harrow is known to be used for leveling the ground.

4) He is said to be a good engineer.

(A) Exercise 2. Match the beginnings of the sentences with their ends. Pay attention to the verbs used with the Complex Subject.

- 1) The choice of profession is known to...
- 2) He is sure to...
- 3) Crops are considered to...
- 4) The soil is reported to ...
- 5) At present many problems in agriculture are likely to ...
- 6) The most modern farm machinery is sure to ...
- 7) Improper use of chemicals is certain to ...
- 8) Fruit crops are known to ...

include apples, cherries, plums, pears
be difficult and important
be subdivided into food crops, feed crops and industrial crops
be used for crop cultivation
enter the BSATU
be dangerous and to cause damage
be connected with ecology
be the basis of agriculture

(A) Exercise 3. Express the same idea:
a) less categorically

Model: This method gives good results.
 This method seems to give good results.

- 1) Applying fertilizers is very efficient.
- 2) The results of the experiment are inaccurate.
- 3) The machine uses force to accomplish something.
- 4) Beet harvesters are available on this farm.

b) more categorically

Model: I believe that he will become a good specialist.
 He is sure to become a good specialist.

- 1) I believe that this problem is of vital importance.
- 2) We suppose that tractors will find a wide application.
- 3) We think this new grain-drill will be available on our farm.
- 4) We believe this new machinery to be used.

(A) Exercise 4. Choose the correct translation for the underlined part of the sentence.

- 1) The scientists are said *to be developing* new kinds of wheat and barley.
 а) разработали в) разрабатывают
- 2) They seem *to have improved* previous results.
 а) улучшают в) улучшили
- 3) An experimental farm proves *to have been built* in this region.
 а) строится в) была построена
- 4) The yields of grain crops are estimated *to be increasing*.
 а) увеличиваются в) увеличатся

(B) Exercise 5. Open the brackets and use the verbs in the correct form.

- 1) Mr. Frolov (to say) to be a good engineer.

2) Most of the farms (to suppose) to have mixed crop and livestock farming.

3) Farm equipment mechanics (to expect) to replace the worn and broken parts.

4) The republic (to know) to be a traditional exporter of agricultural products.

(B) Exercise 6. Point out the sentences containing the Complex Subject and translate them into Russian.

1) To evaluate the results of the research we will study all the experiments carried on in the laboratory.

2) This practice is believed to help raise soil fertility.

3) I know these fertilizers to be applied regularly.

4) We believe the farmers will be able to use the new equipment this year.

(C) Exercise 7. Restore the original sentences.

1) Max/ to study/theoretical/is believed/mechanics.

2) This/ to be/of/is said/ importance/information/utmost.

3) The system/pollution-free/is reported/to be.

4) Young/are known/professionals/in/specialists/their field/to be.

(C) Exercise 8. Translate the sentences into English using your active vocabulary.

1) Известно, что удобрения вносятся в почву в различных формах.

2) Сообщается, что ученые скоро разработают новые виды орудий для первичной обработки почвы.

3) Похоже, что использование этой модели колесного трактора заинтересует фермеров.

4) Считается, что гусеничные тракторы имеют главное преимущество: их можно использовать на любом типе почв.

4. ЗАДАНИЯ ПО УПРАВЛЯЕМОЙ САМОСТОЯТЕЛЬНОЙ РАБОТЕ И РЕКОМЕНДАЦИИ ПО ИХ ВЫПОЛНЕНИЮ

Студенту необходимо вспомнить изученный материал о начальном техническом переводе, грамматических особенностях перевода технического языка, особенностях перевода терминов, способы и приемы перевода, методику составления реферата и аннотации на иностранном языке. Предлагаются задания для УСРС 3 уровней сложности:

- уровень А (репродуктивный) – максимальная оценка знаний-6;

- уровень В (репродуктивный) – максимальная оценка знаний-8;

- уровень С (репродуктивный) – максимальная оценка знаний-10.

Уровень сложности заданий определяется количеством знаков на перевод, объемом текста, степенью сложности текста, заданиями.

Образцы УСРС по модулю «Сельскохозяйственная техника»

**УСРС по модулю «Сельскохозяйственная техника»
Уровень А**

Task 1. Read the text.

The internal combustion engine; first the petrol engine, and later diesel engines; became the main source of power for the next generation of tractors. These engines also contributed to the development of the self-propelled, combined harvester and thresher, or combine. Instead of cutting the grain stalks and transporting them to a stationary threshing machine, these combines cut, threshed, and separated the grain while moving continuously through the field.

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.

Tillage implements prepare the soil for planting by loosening the soil and killing weeds or competing plants. The best-known is the plough. The most common type of seeder is called a planter. 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 into a storable form for the winter months.

Modern irrigation relies on machinery. Engines, pumps and other specialized gear provide water quickly and in high volumes to large areas of land. Similar types of equipment can be used to deliver fertilizers and pesticides.

Task 2. Translate the highlighted paragraph into Russian.

Task 3. Make up an annotation of the text in Russian.

Task 4. Make up a summary of the text in English. Use the given phrases:

The paper deals with...

It is reported that ...

The article is of interest to ...

Task 5. Find in the text the answer to the following question: What contributed to the development of the self-propelled combine harvester?

**УСРС по модулю «Сельскохозяйственная техника»
Уровень В**

Task 1. Read the text.

A forage harvester is a farm implement that harvests forage plants to make silage. Silage is grass, corn or other plant that has been chopped into small pieces, and compacted together in a storage silo, silage bunker, or in silage bags. The silage is then fermented to provide feed for livestock. Haylage is a simi-

lar process to silage but using grass which has dried.

Forage harvesters can be implements attached to a tractor, or they can be self-propelled units. In either configuration, they have either a drum (cutterhead) or a flywheel with a number of knives fixed to it that chops and blows the silage out a chute of the harvester into a wagon that is either connected to the harvester or to another vehicle driving alongside. Some larger machines also have paddle accelerators to increase material speed and improve unloading characteristics. Once a wagon is filled up, the wagon can be detached and taken back to a silo for unloading, and another wagon can be attached. Because corn and grass require different types of cutting equipment, there are different heads for each type of silage, and these heads can be connected and disconnected from the harvester. Grass silage is usually cut prior to harvesting to allow it to wilt, before being harvested from swathes with a collection header (windrow pickup). Maize and whole crop silage are cut directly by the header, using reciprocating knives, disc mowers or large saw-like blades

Task 2. Translate the highlighted paragraph into Russian.

Task 3. Make up an annotation of the text in English.

Task 4. Make up a summary of the text in English.

Task 5. Summarize the information from the text using the key-words: a forage harvester, the silage, cutting equipment, grass silage, maize silage

**УСРС по модулю «Сельскохозяйственная техника»
Уровень С**

Task 1. Read the text.

John Deere equipment is known for its outstanding reliability all over the world. With a John Deere 7050 forage harvester, you can be sure of getting a tough, proven machine that can work flat out all season – without missing a beat. Reliability is only one of its strengths! These versatile machines chop top quality silage – and top quality biomass – more profitably

than ever before. Thanks to the powerful i-solutions and guidance systems, they deliver consistent, high productivity around the clock. They can even provide the data you need to manage your business more effectively. With a powerful new model, a larger header range and new Dura Line parts, this year's range is the best we've ever built. It is built for capacity and quality. John Deere gives all the power and capacity you need, design and build the machines so carefully, test them so thoroughly and equip them with intelligent systems that boost productivity and cut costs, yet still ensure better results than ever before. With the new range of Dura Line, heavy duty crop flow wear parts you exceed the lifetime of standard parts significantly. Dura Line is available for all high wear components including spout liners and caps, bands and floors as well as chutes. Built for efficient harvesting. Intelligent technology –your business advantage John Deere 7050s are designed, engineered and built to work around the clock but it's our innovative technology that really makes them stand out. If you need a machine that will handle all field conditions try the ProDrive propulsion system. If you need a machine that can work through the night choose AutoTrac guidance. For a machine that will produce high quality silage choose the 7050 with its powerful i-features and it will do it for you automatically. The 7050i gives you the tools to run your business more profitably than ever before. It was built for consistency. Efficient harvesting is all about consistency and with i-solutions, you can be sure that whoever is on the machine will get excellent results every time. John Deere automated many systems including metal detection, gear changing, knife sharpening the height and tilt of the header and spout positioning.

Task 2. Translate the highlighted paragraph into Russian.

Task 3. Make up an annotation of the text in English.

Task 4. Make up a summary of the text in English.

Task 5. Share your point of view to the following problem. Innovative features introduced by John Deere. State how they improved operator's work.

5. ПРИМЕРЫ ЗАДАНИЙ ДЛЯ КОНТРОЛЯ РЕЗУЛЬТАТОВ ИЗУЧЕНИЯ МОДУЛЯ

Образец итогового теста по модулю
«Сельскохозяйственная техника»

Методические рекомендации для написания итогового лексического теста по модулю

Для написания итогового теста по модулю необходимо:

1. Повторить теоретический грамматический материал по модулю из раздела «Научно-теоретическое содержание модуля».
2. Повторить словарь-минимум лексических единиц и речевых моделей по теме «Сельскохозяйственная техника» (тексты А, В, С, D).

Choose the correct variant.

1. We know the farmer to have a wide range of _____ to plow and disk, and harrow.
machinery
cars
apparatus
skills
2. The machine is known to be a _____ farm that uses force to accomplish something.
apparatus
skill
machinery
device

3. The aim of tillage is to prepare the soil for _____.

planting
harvesting
fertilizing
harrowing

4. Plow is designed to _____ weeds .

eliminate
illuminate
harrow
apply

5. _____ fall into mounted, semi mounted, disc, moldboard plows.

plows
shares
harrows
tractors

6. The main components of _____ are the main frame, the share, the moldboard, the disc coulter, the skim coulter, the headstock.

plows
harrows
spreaders
hoes

7. The function of _____ is to penetrate into the deeper depths and break up the layers of soil which have become compacted.

sub-soiler
thinner
tractor
baler

8. A _____ is an implement used to level the ground and crush the clods, to stir the soil, and to prevent and destroy weeds.

hoe
plow
baler
harrow

9. There are three principal kinds of _____ namely the disk, the spike-tooth, and the spring tooth.

harrows
baler
hoe
plow

10. _____ is used to break down the soil before or after a crop is sown for covering seeds, for consolidating the soil and for hoeing out weeds.

cultivation machinery
hoe
baler
harrow

11. _____ is any power-operated device introduced to place seeds or plant parts in or on the soil for production of food and feed crops.

planting equipment
fertilizing equipment
harvesting equipment
harrowing equipment

12. Applying such types of _____ as barnyard manure, granular fertilizers, and fertilizers in liquid and gaseous form is necessary where soils are deficient in plant food elements.

fertilizers
nutrients
protein
oxygen

13. Such _____ as manure spreaders, fertilizer distributors, sprayers are in use.

- fertilizing equipment**
- planting equipment**
- cultivation equipment**
- sowing equipment**

14. Crops are _____ by the use of many kinds of harvesting equipment for all types of crops.

- harvested**
- harrowed**
- planted**
- cultivated**

15. The principal machines required to make _____ are mowers, rakes, balers.

- hay**
- fertilizer**
- manure**
- beet**

6. ОТВЕТЫ К ТЕСТОВЫМ ЗАДАНИЯМ

1. machinery
2. device
3. planting
4. eliminate
5. plows
6. plows
7. sub-soiler
8. harrow
9. harrows

10. cultivating machinery
11. planting equipment
12. fertilizers
13. fertilizing equipment
14. harvested
15. hay

7. ДОПОЛНИТЕЛЬНАЯ ЛИТЕРАТУРА

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Пособие

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