Областное государственное бюджетное профессиональное образовательное учреждение

«Старомайнский технологический техникум»

**Методические указания по организации контрольных заданий по техническому переводу**

**по дисциплине «Иностранный язык» для студентов 2-4 курсов**

**Специальность** 35.02.07 «Механизация сельского хозяйства»

р.п.Старая Майна

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 С.В.Радчук

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р.п. Старая Майна

 Г.В.Ширманова

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Автор-разработчик: Шахмарян М.А. — преподаватель иностранных языков.

 Введение

Перевод - выражение средствами другого языка всего того, что уже выражено или выражается средствами языка оригинала.

Овладеть же переводом можно только на базе чтения, письма, аудирования и говорения.

Для письменного перевода с русского на английский надо уметь писать по- английский.

Для письменного перевода текста с английского языка на русский надо уметь читать по-английски.

Для устного перевода английской речи на русский надо уметь аудировать, т.е. воспринимать английскую речь на слух.

Для устного перевода с русского на английский надо уметь говорить по-английски.

Отсюда следует очень важный вывод: недостаточное владение любым другим видом языковой деятельности неизбежно отразится на качестве перевода. И. с другой стороны, в процессе овладения переводом и тренировки в нем неизбежно улучшается качество владения всеми другими видами языковой деятельности, т.е. качество владения иностранным языком.

Письменный технический перевод с иностранного языка на русский или с русского на иностранный выполняется с использованием словарей, общих и специальных, справочников и специальной литературы на русском и иностранном языках, что значительно облегчает груд переводчика.

Если переводить английское предложение с его твердым порядком слон без перегруппировки, го получается так называемый

дословный перевод. Дословный перевод может быть правильным, если все английские слова а предложении имеют эквиваленты в русском языке и структура предложения имеет полное соответствии в русском языке.

Но дословный перевод возможен не всегда, и от дословного перевода, однако следует отличать недопустимый в практике перевода буквальный перевод, т.е. простой механический перевод слов иностранного текста без учета их грамматических и логических связей.

Технические термины

Термин - это слово или словосочетание, которое может иметь отличное от обиходного значение в зависимости от области науки и техники, в которой оно употребляется. Термин может быть простым, состоящим из одного слова*switch-*«выключатель» и сложным термином словосочетанием  *automatic-switch* «автоматический выключатель». Например, слово *face* как существительное имеет обиходное значение «лицо»; широкое техническое значение его - «поверхность»; в геометрии его значение - «грань»; в строительном деле «фасад», «облицовка»; в горном деле «забой», «лава». Но как это естественно для английского языка то, же слово *face*может выступать и как глагол; в этом случае основное значение его обиходное значение - «стоять напротив чего-либо»; в металлообработке это термин, означающий «шлифовать»; в строительном деле - «отделывать», «облицовывать», «покрывать».

Соблюдение следующих правил может быть при переводе терминов:

1.       В специальном тексте  каждое слово, даже очень хорошо знакомое, может оказаться термином. Так. В морском деле *man-of-war* значит не «солдат», а «военный корабль»; в тексте по механике *no play* is admitted надо переводить не «играть нельзя», а «люфт не допускается»; в тексте по экономике выражение *staple sorts,* даже если речь идет о сырье о текстильной промышленности, I может значить не «штапельные сорта», а «основные экспортные copтa»:*shoe* «колодка» в описаний тормозной системы, для электропоезда - «лыжа токоприемника», для гусеницы - «звено»: *dead* - это «обесточенный» в электромеханике, «глухой», т.е. «несквозной» в машиностроении и строительстве; «использованный», когда речь идет о растворах, газе и т.п. Переводя литературу, особенной о малознакомой тематике, надо всегда помнить об этой многозначности. Отсюда следует второе правило:

1. Пользуйтесь при переводе специальными техническими словарями. Следует считать неразумной попытку переводить без словаря; это выглядело бы также странно, как если бы мастер пытался научиться работать без инструмента. Как бы ни была велика память переводчика, он может натолкнуться на незнакомый или малознакомый термин или известный ему термин в совершенно новом значении. При многозначности слова следует брать то его значение, которое принадлежит соответствующей области техники.
2. Может оказаться, что ни одно из значений слова, найденных вами в словаре, не подходит. Это значит, что некоторые значения слова не зафиксированы в словаре. В таком случае вывести из затруднения может хорошее чувство языка, так называемая языковая догадка, но в первую очередь - понимание того, о чем идет речь. Поэтому знакомство с соответствующей отраслью техники, хотя бы по популярным пособиям, или консультация специалиста, имеет огромное значение для правильного перевода.

Транслитерация.

Метод транслитерации передача букв английского языка посредством букв русского языка находит широкое распространение в физике, химии, медицине, космонавтике: *paдаp. голография, грейдер*

Создание новых терминов путем конверсии.

а)        примеры превращения существительных в глаголы:
*Существительное                         Глагол                                Новое  значение*

Doctor – врач                              to doctor                         ремонтировать

Motor - двигатель                         to motor                         1. механизировать

                                                                                  2. работать как двигатель

б)        примеры превращения глаголов в существительные:
*Глагол                                       Существительное           Новое  значение*

То spin off - раскрутить             spinoff                                сопутствующий (побочный)

                                                                                    результат

То throw away – выбросить       throwaway                         бесплатная  рекламная брошюра

Создание новых терминов при помощи префиксов и суффиксов

а)        префиксы

inter-:        interaction        взаимодействие

                        interface        интерфейс, сопряжение

б)        новые суффиксы -ry, -ship, -wise:

circuitry        схемное решение, комплекс схем

workmanship              мастерство. квалификация

percentagewise        считая в процентах

Создание новых терминов при помощи словосложения *motel* - мотель (автомашина+гостиница) = *motor+hotel*:*escalator* - эскалатор (поднимающий элеватор) = *escalating elevator*.

f

**Грамматический справочникМестоимения**

Местоимения употребляются в предложении вместо имени существительного или имени прилагательного. Местоимение называет на людей, предметы или признаки уже упомянутые ранее. Например:

Nick gave Kate a book. She took it.

Николай дал Кате книгу. Она её взяла.

You have a good dictionary. I want to buy such a dictionary.

У вас хороший словарь. Я хочу купить такой словарь.

Вопросительное местоимение WHO относится к словам, обозначающим людей.

Вопросительное местоимение WHAT относится к словам, обозначающим вещи, или род деятельности. Например:

Who is he? Кто он? (как его зовут) Не is   Mr. Johnson.

What is he? Кто он? (по профессии?) Не is a teacher.

В английском языке нет родов есть только местоимения и слова,
обозначающие людей мужского рода (he, man, boy,-son, husband, king
и т. д.).

Местоимения и слова, обозначающие людей женского рода (she, girl, woman, daughter, queen и т.д.)

Английские слова, а также местоимение -It-, обозначающие вещи и животных соответствуют среднему роду русского языка.

Объектный падеж в английском языке заменяет все падежи русского языка

Личные местоимения

(Personal pronouns)

Склонение личных местоимений

|  |  |  |  |
| --- | --- | --- | --- |
| Число | Лицо | Именительный падеж | Объектный падеж |
| Ед. | 1 | I-ЯYou-ТыShe-ОнаНе- ОнIt-OHO | Ме - МнеYou-Тебе, ВамНег- ЕйHim-ЕмvIt-неодуш.  Emv.,Ей |
|  | 2 |  |  |
|  | 3 |  |  |
| Мн.\_ | 123 | We-МыYou-ВыThey-Они | Us-НамYou-ВамThem-Им |

Притяжательные Местоимения

|  |  |  |  |
| --- | --- | --- | --- |
|        Число |       Лицо |     Основная форма (перед существительн.) |    Абсолютная форма   (без существительн) |
| Ел, | I | "My | MineYoursHisHersIts |
|  | 2 | Your |  |
|  | 3 | His |  |
|  |  | Her |  |
|  |  | Its |  |
| Мн. | 123 | OurYourTheir | OursYoursTheirs |

**Местоимения *little* и *few* и местоименные выражения  *а little*и*a few***

Местоимение ***little*** и местоименное выражение ***a little***употребляются с неисчисляемыми существительными, местоимение ***few***и местоименное выражение ***a few****-*с исчисляемыми:

*Give те a little water, please.*

*There is little milk in the bottle.*

*I have a few friends in Minsk.*

*I've got only few pencils in the box.*

**Имя существительное**

           Существительные: собственные и нарицательные, конкретные и абстрактные.

Число: единственное и множественное. Основные способы образования множественного числа.

Падеж: общий и притяжательный. Падежные формы и значения, их употребление с существительными: 1) обозначающими одушевленные предметы, 2) обозначающими неодушевленные предметы.

**Множественное число существительных**

Мн. число сущ, образуется путём прибавления к основе окончания –s-:

a  boy - boys

 a book- books

 a pen-pens

 a girl- girlsМн. число сущ., основа которых оканчивается на -***ch, s, ss, sh, x,*** а также существительных, имеющих окончание *-о.*образуется путём прибавления окончания ***-es,:***

*a bench- benches*

*a bus-buses*

*a glass-glasses*

*a box-boxes*

*a potato-potatoes*

Существительные, оканчивающиеся на-***y*** (после согласной') во множественном числе имеют окончание *-****ies:***

a baby- babies

a fly-flies

 a lady- ladies

Если слово оканчивается –*f, (fe),*то во множественном числе на-v и добавляется *-****es:***

a life-lives

a knife-knives

 a shelf-shelves

a wife-wives

Как и в любом правиле в образовании мн. числа сущ, есть слова составляющие исключения, т. е. они образуют мн. число не по общим правилам в этом случае необходимо заглянуть в словарь и запомнить их:

a man-men

 a deer- deer

 a formula-formulae

и т.д.

**Артикли**

Неопределённый -*a,an,*

Определённый *–the*

Перед каждым нарицательным существительным должен стоять артикль.

Если вы не употребляете перед существительным артикль, вы должны уметь объяснить, почему.

Артикль не употребляется, если перед существи тельным стоит притяжательное или указательное мес тоимение, другое существительное в притяжательном падеже, количественное числительное или отрицание **"по"**(не **"not"!).**

Неопределённый артикль имеет значение единственного числа, и поэтому употребляется с существительными единственного числа:
*A boy, a table, a student  и т.д.*

         Определённый артикль употребляется тогда, когда предмет упоминается вторично или просто  известен говорящим а также выделяет предмет или предметы из класса им подобных и придаёт значение  слова  этот, эти:

*The book I bought yesterday was interesting.*

*Open the door  please.*

         Определённый артикль употребляется. когда речь идёт о единственном в своём роде предмете или явлении:

*The moon (луна) is bright this night.*

Неопределенный артикль a (an) может употреб ляться только с исчисляемыми существительными, стоящими в единственном числе. Перед неисчисляе-мыми существительными или существительными во множественном числе неопределенный артикль опус кается. Определенный артикль the употребляется как с исчисляемыми, так и с неисчисляемыми существи тельными, как с единственным, так и с множествен ным числом.

*This is a book. The book is interesting.*

исчисляемое в единственном числе

*This is ✓ meat. The meat is fresh.*

неисчисляемое множественное число

*These are ✓ books. The books are good.*

Запомните следующие словосочетания, в которых артикль не употребляется:

*at / school*

*at/ home*

*at /'work*

Если перед существительным употребляется прилагательное, оно стоит между артиклем и существительным.

*This is a book. This is a good book.*

Кроме того, существует огромное количество так называемых устойчивых словосочетаний, в которых артикль употребляется или отсутствует традиционно. Эти словосочетания приходится заучивать наизусть.

Запомните следующие конструкции:

          *There is а ... . Where is the ... ?*

Запомните также следующие предложения:

*The (book) is on the (table).*Ho:*The (book) is on a little (table)*

Запомните следующие конструкции, требующие неопределенного артикля:

*I have а ... Не has а ... I see а ...*

*This is а ... That is а ... It is a ...*

*There is a ...*

*I am a ... He is a ... She is a ...*

Запомните следующие устойчивые словосочетания:

*in the middle*

*in the corner*

|  |  |  |
| --- | --- | --- |
| **Положительная** | **сравнительная** | **превосходная** |
| Strong | Stronger | The strongest |
| (сильный) | (сильнее) | (сильнейший) |
| Cold | Colder | The coldest |
| (холодный) | (холоднее) | (самый холодный) |
| **Прилагательные составляющие  исключение** |  |  |
| Good | Better | The best |
| (хороший) | (более  хороший) | (самый хороший) |
|  | (лучше) | (лучший) |
| Bad | Worse | The worst |
| (плохой) | (более плохой, хуже) | (самый плохой) |
|  |  | (худший) |
| Little | Less | The least |
| (маленький) | (меньше.) | (самый маленький) |
| Much, many | More | The most |
| (много) | (больше) | (больше всего) |
|  |  | (самый большой) |
| Far | Farther | The farthest |
| (далёкий) | (более далёкий) | (самый далёкий) |
| Far | Further | The furthest |
| (далеко) | (дальше) | (дальше всего) |

*to the right t*

*on the left*

13

**Имя прилагательное**

**Сравнительная степень прилагательных и наречий**

**Модальные глаголы и их заменители**

Модальные глаголы не имеют эквивалент в русском языке, они выражают отношение говорящего к действию, выраженного инфинитивом без частицы *- tо-.*

1*.****Сап***- мочь (умственная и физическая возможность)
***Соuld***-прошедшее время        *\**

I can swim.  - Я умею плавать.

I could translate this text. - Я мог бы перевести этот текст.

2. ***May*** - мочь, (иметь возможность, разрешение')

***Might****-*прошедшее время

May I help you. - Разрешите помочь вам.

Заменитель-конструкция  ***to be allowed to****.*

He will be allowed to take the book.  Ему разрешат взять книгу.

*3.****Must****-*должен, обязан

Формы прошедшего времени нет

Заменители *-****have to****,****to be to,  ought to, should***

***Had to, was  (were) to***-прошедшее время

You must write it down now. -Вы должны написать это сейчас.

 She had to stay at home. Oнa вынуждена была (ей пришлось) остаться -дома

The train was to arrive at 8 in the  evening.- Поезд должен был прибыть в 8 вечера.

Ought  to, should Ц(значение совета, рекомендации, упрёка)

Children ought to obey their parents. Дети должны слушаться своих родителей.

You should have helped them. Вам следовало бы помочь им.

4.Would- вежливая просьба, повторяемость действий в прошлом, стойкое нежелание совершать какие-либо действия.

Would  you help me?  (Не поможете ли вы мне?)

Не would often help me. (Он  бывало, часто помогал мне.)

Не wouldn't listen to me. (Он никак не хотел слушать  меня.)

5. Need – нужно, надо (употребляется, в основном, в отрицательных предложениях*)*

You  needn't do it now. Вам не нужно делать это сейчас.

**Словообразование**

**Основные суффиксы существительных**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Суффикс | К какой частиречи добавляется | Основное значение образованных слов | Примеры | Перевод |
| *-ant/ent* | К глаголам | Принадлежность к | Assistant | Ассистент |
|  |  | профессии | Student | Студент |
| *-er/-or* | К глаголам | Действующее лицо | Reader | Читатель |
|  |  | или механизм. | Worker | Рабочий |
|  |  | производящий | Visitor | Посетитель |
|  |  | действие |  |  |
| *-dom* | К существ., | Состояние, качество | Freedom | Свобода |
|  | прилагат. |  |  |  |
| *-er* | К существ. | Имясуществительное, обозначающее жителя | Londoner | Лондонец |
| *-hood* | К существ. | Состояние | Childhood | Детство |
| *-fan* | К существ. | Профессия | Physician Technician | Врач Техник |
| *-ics* | К существ. | Название науки | Phvsics | Физика |
| *-ing* | К глаголам | Процесс, действие. | Reading | Чтение |
|  |  | состояние | Smoking | Курение |
| *-ion(-tion,* | К глаголам | Процесс, название | Revolution | Революция |
| *atton)* |  | действия, состояние | Solution Aviation | Раствор Авиация |
| *-ism* | К существ.. | Учение, теория. | Darwinism | Дарвинизм |
|  | прилагат. | направление | Heroism | Героизм |
| *-ment* | К глаголам | Результат действия | Equipment Settlement | Оборудование Поселение |
| *-ness* | К прилагат. | Качество или | Softness | Мягкость |
|  |  | состояние | Darkness | Темнота |
| *-ship* | К существ. | состояние | Friendship | Дружба |

**Основные суффиксы прилагательных**

|  |  |  |  |
| --- | --- | --- | --- |
| Суффикс | Основное значение образованных слов | Примеры | Перевод |
| *-able* |  | Valuable | Ценный |
| *-al* | Наличие качества, | Electrical | Электрический |
|  | свойства | Medical | Медицинский |
| *-ant* | Наличие качества, | Resistant | Сопротивляющийся |
|  | свойства | Different | Различный |
| *-ary* | Наличие качества | Revolutionary | Революционный |
| *-ful* | Наличие признака | Useful | Полезный |
| *-ish* | Наличие качества, | Childish | Детский |
|  | свойства | Reddish | Красноватый |
| *-ive* | Отсутствие качества | Creative | Созидательный |
| *-less* | Наличие качества | Useless | Бесполезный |

**Основные суффиксы глаголов**

|  |  |  |
| --- | --- | --- |
| Суффикс | Примеры | Перевод |
| *-ate* | Investigate | Активизировать |
| *-en* | Harden | Закаливать |
| *-fy* | Classify | Классифицировать |
| *-ize* | Memorize | Запоминать |

|  |  |  |  |
| --- | --- | --- | --- |
| Суффикс | Основное значение образованных слов | Примеры | Перевод |
| *-у* | Изменяет часть речи | Badly | Плохо |

**Основные суффиксы наречий**

**Времена английского глагола**

**Таблица временных форм глагола**

|  |  |  |  |
| --- | --- | --- | --- |
| Время | Простое Indefinite (Simple) | Длительное Continuous | ЗавершенноеPerfect |
| Настоящее | I write.Я пишу (вообще, обычно). | I am writing.Я пишу (сейчас). | I have written.Я (уже) написал. |
| ПрошедшееPast | I wrote.Я (на)писал (вчера). | I was writing.Я писал (в тот момент). | I had written.Я написал (уже к тому моменту). |
| Будущее Future | I shall/will write.Я напишу, буду писать (завтра). | I shall/will be writing.Я буду писать (в тот момент). | I shall/will havewritten.Я напишу (уже к тому моменту). |

**Группа временных форм Indefinite (Simple)**

**Формы глагола в Present Indefinite**

|  |  |  |  |
| --- | --- | --- | --- |
| Число | Утвердительная форма | Вопросительная форма | Отрицательная форма |
| Ед. | I (you) ask.Не (she, it) asks | Do I (you ask?) Does he (she, it) ask? | I (you) do not ask.He (she, it) does not ask. |
| Мн. | We (you, they) ask | Do we (you, they) ask? | We (you, they) do not ask. |
| **Формы глагола в Past Indefinite** |  |  |  |
| Число | Утвердительная форма | Вопросительная форма | Отрицательная форма |
| Ед. и мн. | I (you, he, she, it, we. they) asked. | Did I (you, he she. it. we, they) ask? | I (you, he, she, it, we, they) did not ask? |

**Правильные и неправильные глаголы (*regular and irregular verbs***)

По способу образования прошедшего времени все глаголы в английском языке можно разделить на две группы: правильные и неправильные. У неправильных глаголов вторая и третья формы (*Past Indefinite Tense и Past Participle* - простое прошедшее время и причастие прошедшего времени) совпадают между собой и образуются путем прибавления к основе глагола окончания - *-ed  (-d):*

*То as к - asked        to change - changed*

*To receive - received        to work*- *worked*

Неправильные глаголы образуют вторую и третью формы различными способами, без четких правил. Это наиболее часто употребляемые глаголы. В конце книги приведен список часто встречающихся неправильных.

**Формы глагола в Future Indefinite**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Число |  | Утвердительная форма |  | Вопросительная форма |  | Отрицательная форма |
| Ед. |  | I shall ask.You (he, she it) will ask. |  | Shall I ask?Will you (he, she, it) ask? |  | I shall not ask.You (he, she, it) will not ask. |
| Мн. |  | We shall ask.You (they) will ask. |  | Shall we ask?Will you (they) ask? |  | We shall not ask. You (they) will not ask. |
| **Группа временных форм Continuous****Формы глагола в Present Continuous** |  |  |  |  |  |  |
| Число | Утвердительная форма |  | Вопросительная форма |  | Отрицательная форма |  |
|       Ед. | I am asking.You are asking.He (she, it) is asking |  | Am I asking?Are you asking?Is he (she, it) asking? |  | I am not asking.You are not asking.He (she, it) is not asking. |  |
|      Мн. | We (you, they) are asking. |  | Are we (you, they) asking? |  | We (you, they) are not asking. |  |
| **Формы глагола в Past Continuous** |  |  |  |  |  |  |
| Число | Утвердительная форма |  | Вопросительная форма |  | Отрицательная форма |  |
|      Ед. | I (he, she) was asking.You were asking. |  | Was I (he. she, it) asking? Were you asking? |  | I (he. she, it) was not asking.     You were not asking. |  |
|     Мн. | We (you. they) were asking. |  | Were we (you, they) asking? |  | We (you. they) were not asking. |  |
| **Формы глагола в Future Continuous** |  |  |  |  |  |  |
| Число | Утвердительная форма |  | Вопросительная форма |  | Отрицательная форма |  |
|      Ед. |          I shall be asking. You (he. she. it) will be asking. |  |     Shall 1 be asking?Will you (he, she. it) be asking? |  |      I shall not be asking.You (he, she, it) will not be asking |  |
|      Мн. |     We shall be asking.You (they) will be asking. |  |      Shall we be asking? Will you (they) be asking? |  |   We shall not be asking.You  (they)  will not beasking. |  |

**Группа временных форм Perfect**

**формы глагола в Present Perfect**

|  |  |  |  |
| --- | --- | --- | --- |
| Число | Утвердительная форма | Вопросительная форма | Отрицательная форма |
| Ед. | I (you) have asked.Не (she, it) has asked. | Have I (you) asked?Has he (she, it) asked? | I (you) have not asked.He (she, it) has not asked. |
| Мн. | We (you, they) have asked. | Have we (you, they) asked? | We (you, they) have not asked. |
| **Формы глагола в Past Perfect** |  |  |  |
| Число | Утвердительная форма | Вопросительная форма | Отрицательная форма |
| Ед. и мн. | I (you, he, she, it, we, they) had asked. | Had I (you, he, she, it, we,they) asked? | I (you, he, she, it, we, they) had not asked. |
| **Формы глагола в Future Perfect** |  |  |  |
| Число | Утвердительная форма | Вопросительная форма | Отрицательная форма |
| Ед. | I shall have asked.You (he, she, it) will have asked. | Shall I have asked? Will you (he, she, it) have asked? | I shall not have asked.You (he, she, it) will not have asked. |
| Мн. | We shall have asked.You (they) will have asked. | Shall we have asked? Will you (they) have asked? | We shall not have asked.You (they) will not have asked. |

**Наклонения в английском языке**

      Английские глаголы имеют 3 наклонения – изъявительное, повелительное и сослагательное/условное – определяющие типы предложений.

**Изъявительное**

      Изъявительное наклонение констатирует деятельность по факту в повествовательных (утвердительных/отрицательных) и вопросительных (утвердительных/отрицательных) предложениях. Это основное наклонение, описывающее реальность и делающее запросы личными глагольными формами. Большинство утверждений изъявительны.

*I know you write such things in your notebook* – Я знаю, что ты записываешь такие вещи в блокнот

**Повелительное**

      Повелительное наклонение побуждает к деятельности указанием, запретом, просьбой, советом в повелительных и восклицательных предложениях. Это простейшее наклонение с 2 формами – действительной (простой инфинитив) и страдательной (страдательный инфинитив). Пассивное повелительное очень редко.

*Write it in your notebook* – Запиши это в блокноте

Повеление иногда бывает эмоционально-усилительным, со служебным *do* в начале.

*Do wake up!* – Да, просыпайся же!

Отрицательное повеление очень распространено и начинается с запретного *don’t.*

*Don’t give up* – Не сдавайся

    Отрицательное повеление тоже может быть в эмфазе, начинаясь с *you.* Такой разговорный запрет не следует путать с утверждением, в чём обычно помогает контекст и восклицательный знак.

*You don’t say no!* – Не вздумай отказываться!

Именное повествовательное повеление стало настолько книжным, что уже устарело.

*God bless America!* – Боже, благослови Америку!

    Другой повелительный оборот – с глаголом *let,*означающим предложение к подразумеваемому *you.* Обиходная форма оборота - *let’s.*

*Let’s go!*- Пойдём

*Let it be* – Да будет так

**Сослагательное/Условное**

      Условное наклонение предполагает выдумку в повествовательных (утвердительных/отрицательных) и вопросительных (утвердительных/отрицательных) предложениях. Это наисложнейшее наклонение со множеством видов, факторов и значений.

*I wish you wrote such things in your notebook*– Жаль, что ты не записываешь такие вещи в блокнот

       Условное передаёт указание/совет/просьбу в придаточном цели после глаголов *advise, ask, command, demand, insist, order, recommend, request, require, suggest, urge.*

*The teacher asked that we be quiet* – Учительница сказала, чтоб мы притихли

     Для умозрительного будущего используется настоящее простое время как условие (с*(as) if)* и будущее простое как результат.

*If I (should) see him, I’ll tell him* – Увижу его - передам

      Для невозможного настоящего (пожелание) используется прошедшее простое время в условном придаточном и часто сослагательные модальные глаголы *should/would/could/might* в основной части. Условное *be* становится *were*(а не was).

*If I were you, I wouldn’t keep driving on those tires* – На твоём месте я бы не ездил на этих шинах

*I wish you were here* – Жаль, что тебя здесь нет

    Для упущенного прошлого (предположение) используется предпрошедшее время в придаточном и часто сослагательные модалы с совершённым инфинитивом в основной части.

*If I had told you the truth, you’d have fainted* – Скажи я тебе правду тогда, ты бы упала в обморок

Пожелание также формально выражается модальным глаголом *may*.

*May you live long and prosper* – Да живите долго и богато!

**Страдательный залог**

**(Passive Voice)**

     Формы страдательного залога английских глаголов образуются с помощью вспомогательного глагола ***to be***в соответствующем времени, лице и числе и *причастия II***(Participle II)** смыслового глагола:

Present Indefinite:     The letter is written

Past Indefinite:          The letter was written.

 Future Indefinite:     The letter will be written.

Present Continuous:  The letter is being written.

Past Continuous:       The letter was being written.

Future Continuous:   The letter will have been written.

Present Perfect:         The letter has been written.

Past Perfect:              The letter had been written.

Future Perfect:          The letter will have been written.

     Причастие I **(Participle I)**  (причастие настоящего времени), образованное при помощи окончания *-****ing****,*имеет активную и страдательную формы:

Активная(несовершенный вид) – *asking*

Активная(совершенный вид) - *having asked*

Страдательна*я*(несовершенный вид) - *being asked*

Страдательная (совершенный вид) – *having been asked*

**Причастие II (Participle II)**

Причастие II (причастие прошедшего времени) всегда ***пассивно****.*Образуется оно прибавлением суффикса *–****ed***к основе правильного глагола или путем чередования звуков в корне неправильного глагола.

**Употребление герундия и его отличие от причастия I**

       Причастие - неличная форма глагола, промежуточная между глаголом и прилагательным.

      Герундий является неличной формой глагола, промежуточной между существительным и глаголом:

*Smoking is harmful. -*Курение (что?) вредно.

     Иными словами, причастие - в больше степени «прилагательное» по своим функциям, герундий - «существительное».

**Герундий**

      Герундий в английском языке выражает название действия и обладает признаками существительного и глагола. Как и существительное, герундий может быть в предложении:

Подлежащим:

*Travelling is a very adventurous thing*. — Путешествие – это очень увлекательное занятие.

Дополнением (прямым и предложным):

*I don’t mind staying*. — Ничего, я останусь.

*I am good at playing football*. — Я хорошо играю в футбол.

Обстоятельством:

*He left without saying a word.* — Он ушел, не проронив ни слова.

Именной частью сказуемого:

*His task was translating an article*. — Его заданием был перевод статьи.

А в группе с предлогом of может являться определением:

*I like her way of doing this.* — Мне нравится, как она это делает.

     Герундий может быть определен притяжательным и указательным местоимением, либо существительным в общем и притяжательном падеже (*his singing* – его пение, *my friend’s speaking* – речь моего друга). Перед герундием может стоять предлог *(before leaving* – перед уходом).

**Придаточные предложения:**

      Условные предложения могут выражать реальные, маловероятные (условные предложения I типа) и нереальные условия (условные предложения II типа).

**Условные предложения I типа**

       Условие, содержащееся в условном придаточном предложении, рассматривается говорящим как реально предполагаемый факт, относящийся к настоящему, прошедшему или будущему временам. Сказуемые главного и придаточного предложений выражаются глаголами в формах изъявительного наклонения.

*If the weather is nice, we go for a walk*. Если погода хорошая, мы ходим на прогулку.

*If the weather was nice, we went for a walk.* Если погода была хорошая, мы ходили на прогулку.

*If the weather is nice, we'll go for a walk*. Если погода будет хорошая, мы пойдём на прогулку.

**Условные предложения II типа**

       Условие, содержащееся в условном придаточном предложении, рассматривается говорящим как маловероятное. Для выражения малой вероятности осуществления действия в настоящем или будущем временах сказуемое главного предложения употребляется в форме сослагательного наклонения *should / would + Indefinite Infinitive* без to, а сказуемое придаточного предложения - в форме сослагательного наклонения, аналогичной Past Indefinite или were для всех лиц от глагола to be.

*If he were free, he would do it.* Если бы он был свободен, он бы это сделал.

*If we paid more attention to grammar, we should know the language better.* Если бы мы уделяли грамматике больше внимания, мы бы знали язык лучше.

**Условные предложения III типа**

       Условие, содержащееся в условном придаточном предложении, рассматривается говорящим как неосуществимое, так как относится к прошлому времени. Сказуемое главного предложения употребляется в форме сослагательного наклонения *should / would + Perfect Infinitive,* а сказуемое придаточного предложения в форме сослагательного наклонения, аналогичной Past Perfect.

*I should not have been late yesterday, if my watch had been right.* Я бы не опоздал вчера, если бы мои часы шли правильно.

**Союзы условных придаточных предложений.**

*if*- если*; in case* - в случае, если; *suppose (that)* - предположим, что; *on condition (that)* - при условии, что; *provided (that)* - при условии, что; *unless* - если … не; *but for* - если бы не.

**Придаточные предложения следствия**

       Придаточные предложения следствия выражают следствие, вытекающее из содержания главного предложения. Они присоединяются к главному предложению союзами *such* ... *that* - такой... что, *so (...) that* - так что:

*The children made such a noise that I couldn't work*. Дети так шумели, что я не мог работать.

*A tall man stood in front of me so that I couldn't see the picture well*. Передо мной стоял человек высокого роста, так что я не мог хорошо видеть картину.

     Так же как и в русском языке, соотносительная усилительная частица *so* так может входить в состав главного предложения для подчеркивания, усиления того или иного качества, а местоимение *such* такой (таковой) как средство усиления сочетания с существительным всегда входит в состав главного предложения.

*The book was so difficult that I couldn't read it.* Книга была так трудна, что я не мог читать ее.

*He spoke in such a low voice that we didn't (couldn't) hear him.* Он говорил так тихо, что мы не слышали его.

      Обратите внимание на то, что в придаточном предложении следствия часто употребляется модальный глагол can - могу:

*My friend was so busy yesterday that he couldn't go to the country with me.* Мой друг был так занят вчера, что не мог поехать со мной за город.

**Примечание.**Там, где в русском языке такой, такая, такое, такие употребляются для усиления в простом предложении, в английском языке перед наречием и прилагательным может быть употреблено усиление *very, most, that,* а в качестве усиления существительного - такие слова и выражения, как *this,  like this,  of this type  (kind, sort)*

и т. п.

*I don't like this weather. (= 1 don't like bad weather like this.)* Я не люблю такую погоду.

*This kind (this type) of machine(s) is not sold by us. (= Machines of this type (of this kind) are not sold by us.)* Такие машины не продаются нами.

*These are very difficult exercises*. Это такие трудные упражнения.

*These are very (= most) interesting books*.Это такие интересные книги.

*The talk was most interesting*. Доклад был такой интересный!

*Is it that important?* Это так важно?

**Методические указания по выполнению контрольной работы**

Для того  чтобы выполнить контрольные задания нужно:

1. Усвоить специальный лексический материал, перевести технический текст (с английского языка на русский) при помощи политехнического словаря и конспектов сделанных во время семинаров;
2. Ответить на вопросы после текста, которые задаются с целью проверки понимания;
3. Выполнить упражнения:

       а)  на повторение грамматического материала;

       б) на перевод с русского языка на английский язык;

1. Каждая работа выполняется в отдельной тетради школьного формата. Следует пронумеровать страницы и оставить на них поля не менее 3 см. для замечаний преподавателя.
2. На обложке тетради должен быть титульный лист утвержденного образца, аккуратно записаны все данные титульного листа: шифр, специальность, если она не отражена в шифре, фамилия, отчество студента, предмет и номер работы.
3. Решение задач желательно располагать в порядке номеров, указанных в задании, номера задач следует указывать перед условием.
4. Условия заданий должны переписываться полностью в контрольную тетрадь.
5. Если в работе допущены недочёты и ошибки, то студент должен выполнить все указания преподавателя, сделанные в рецензии.
6. Контрольные работы должны быть выполнены в срок (в соответствии с учебным планом-графиком). В период сессии работы на проверку не принимаются.
7. Работа, выполненная не по своему варианту, не учитывается и возвращается студенту без оценки.
8. Методическая разработка содержит 10 вариантов контрольных работ. Номер варианта выбирается по двум последним цифрам шифра (номера личного дела) и определяется по таблице распределения контрольных работ. Например, студенты, имеющие шифры 41,42 получат варианты 2, 3. Студенты, у которых шифры от 1 до 9, должны добавить впереди цифру «0», т. е. они получат вариант 01, 02, 03,………        ,09.

**Таблица распределения заданий по вариантам:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Предпоследняя цифра шифра | Последняя цифра шифра |  |  |  |  |  |  |  |  |  |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 11 | 12 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 8 |
| 2 | 7 | 6 | 5 | 4 | 3 | 12 | 11 | 10 | 9 | 7 |
| 3 | 5 | 4 | 3 | 12 | 11 | 3 | 4 | 5 | 6 | 7 |
| 4 | 8 | 9 | 10 | 1 | 2 | 4 | 5 | 6 | 7 | 8 |
| 5 | 9 | 10 | 11 | 12 | 3 | 5 | 6 | 7 | 8 | 9 |
| 6 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 12 | 11 |
| 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 8 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 . | 1 | 8 |
| 9 | 11 | 12 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

**Контрольные работы для студентов специальности техник-электрик**

**Задание №1**

I.    Translate the text.

**The nature of electricity**

       The ancient Greeks knew that when a piece of amber is rubbed with wool or fur it achieves the power of attracting light objects. Later on the phenomenon was studied, and, the word *electric,*after the Greek word 'electron", meaning amber was used. Many scientists investigated electric phenomena, and during the nineteenth century many discoveries about the nature of electricity, and of magnetism, which is closely related to electricity, were made. It was found that if a sealing-wax rod is rubbed with a woolen cloth, and, a rod of glass is rubbed with a silken cloth; an electric spark will pass between the sealing-wax rod and the glass rod when they are brought near one another. Moreover, it was found that a force of attraction operates between them. An electrified sealing-wax is repelled, however, by a wax rod, and also an electrified glass rod is repelled, by a similar glass rod.

      The ideas were developed that there are two kinds of electricity, which were called resinous electricity, and that opposite kinds of electricity attract one another, whereas similar kinds repel one another.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Answer the following questions:

1. When was found electric phenomena?
2. What does a force of attraction mean?
3. What kinds of   electricity are there?

IV. Supply *some, any, no,*where required

1. ... pupils went to the river,  ... to the woods. 2. ... of my friends live in Moscow. 3. ...Have you ... English dictionaries? 4. Is  there ... ink in the inkstand? Yes, there is... 5. Bring ...chalk, please. 6. There is ... chalk in the box. 7. Is there ... milk in the jug? Yes, there is

V. Fill in blanks with the Past Progressive or the Past Simple Tense of the verbs in margin.

1. We ... to a lecture yesterday at ten o'clock.                listen
2. She ... the piano from 11 till 12 o'clock.                play
3. When he ... in, I ... my exercises.                       come, do
4. What ... you yesterday at 8 o'clock?               do
5. Yesterday when I ... the newspaper, my sister ... to a concert over the radio.        read, listen
6. She ... out of the window when I ... her.                          look, see
7. I ... along the street with my friend when the car ... by.                   walk

VI. Choose the correct variant

 1. Before you \_\_\_\_, don't forget to lock the door.

  -are leaving                  -will leave                -leave                     -shall leave

 2. Please do not speak to anyone before the police \_\_\_\_ .

  -come                       -are coming                 -’ll come, came

 3. His parents will be very glad if she\_\_\_\_ the university.

  -enter                       -’ll enter                       - enters                    - entered

 4. When you \_\_\_\_ my brother, you \_\_\_\_ him.

  -'ll see;   - won't recognize;    - see won't recognize;    -saw, recognize;    -'ll see, don't recognize

 5. We won't discuss the matter until the headmaster \_\_\_\_\_\_ .

  -'ll arrive                - won’t arrive

  - doesn’t arrive-         -arrives

**Задание №2**

1. Translate the text:

**What is electricity?**

       Have you ever gotten a shock when you touched a doorknob, or seen sparks fly when you combed your hair? That's electricity.

       Electricity is a type of energy that gives things the power to work. This energy comes from electrons. Scientists have learned how to use electrons to produce electricity. I.

Classes of electricity.

     The study of electricity may be divided into three classes or branches: magnetism, electrostatics, and electrodynamics. Magnetism is the property of the molecules of iron and certain other substances through which they store energy in a field of force because of the arrangement movement of the electrons in their atoms. Electrostatics is the study of electricity at rest, or static electricity. Examples of this type of electricity are charges on condenser plates. Rubbing glass with silk produces static electricity. Electrodynamics is the study of electricity in motion, or dynamic electricity. The electricity which flows through wires for light and power purposes is a good example of latter type of electricity.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III.Translate the text:

Оборудования работающего на основе использования возобновляемых источников энергии для автономного тепло- и электроснабжения частных домов и зданий. С его помощью можно частично или полностью покрыть энергозатраты практически любого объекта.

- солнечные вакуумные водонагреватели для круглогодичного производства горячей воды

 - ветрогенераторы для выработки электроэнергии.

 - солнечные фотоэлектрические батареи и товары на их основе – зарядные устройства, фонари.

 - энергоэффективные светодиодные лампы

IV. Fill in the blanks with the articles *a, an, the*, where necessary.

We live in ... nice flat  ... new house near ... park.  ... flat is on … second floor. There are ... two rooms in it. We have also ... kitchen and … bathroom.  ... kitchen is ... big enough. As ... rule, my mother cooks for us. We spend ... lot of ... time together in ... kitchen. There is ... TV set in

... corner of ... kitchen, and we often watch ... TV there.

V. Replace the infinitives given in brackets by the Future Progressive or the Present Simple:

1. The delegation (to start) for London as soon as they (to receive) their visas.
2. At the travel bureau they (to tell)  you exactly when the train (to leave).
3. Ask the Smith if it (to take) him long to make a duplicate of this key.
4. I (not to think) I (to be able to) call on them and (to say) good-bye before I (to go)        abroad.
5. If you (not to want) to climb the tree you can shake it and the apples (to fall) down to the ground.
6. If I (to go) to Moscow I usually (to stay) at my friends.
7. Ask him when he (to. finish) packing.

VI. Переведите предложения. Определите, какое значение приобретают выделенные слова в контексте следующих предложений.

1 .The soldier is now at his **post**. 2. The man did his best to get a better **post**.3.I will send you the book by **post**. 4. The wooden gate was supported by two metal **posts**.

**Задание № 3**

I.        Translate the text.

**Electroscope**

      An electroscope is a sensitive instrument for detecting small electric charges. It consists of a glass-jar   closed with a stopper of insulting material in which is fitted a varnished glass-tube. A rod passes through the tube. At the top of the rod there is a metal ball or disc at the bottom of the rod two pieces of gold leaf are suspended. When is charge is brought near the electroscope, a charge of opposite sign is induced on the metal ball, and a charge of the same sign appears on the two of the gold leaves. Since, the two pieces of gold leaf now have charges of like sign they repel each other.

     As an example a negatively charged glass rod is brought to the electroscope. A positive charge is induced on the ball and a negative charge appears on the two pieces of gold leaf.

    The polarity of a charge may be determined by means of an electroscope. We charge the electroscope negatively by touching the ball with the rod of hard rubber which is rubbed with flannel or silk. If the unknown charge is brought to the electroscope it will induce on the ball a charge of opposite polarity and on the gold leaves a charge of the same polarity as that of the unknown charge. Therefore, if the unknown charge is negative, the gold leaves will repel each other; if it is positive, they will attract.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

ЭЛЕКТРОСКОП, прибор для обнаружения электрического заряда. Наиболее распространен электроскоп с золотыми листочками, в котором две золотые пластинки, прикрепленные к проводнику, помещены в изолированный корпус. Если к стержню проводника подвести электрический заряд, пластинки разойдутся, и степень расхождения указывает на величину заряда.

IV. Fill in the pronouns.

When Mary came to the dining room ... took off ... coat and sat down. The waitress soon brought ... some soup. When Mary finished ... dinner ... looked at ... watch, put on ... coat and went out. (Now Mary tells her little brother John what he must do when he goes to the dining room): ... must take off ... coat and sit down. Then the waitress will bring ... some soup. When

... finish ... dinner ... must put on ... coat and go out.

V.        Use the Present Indefinite, the Present Perfect or the Past Indefinite.

1. You ever (to be) to the picture gallery?-Yes, I (to be). I (to visit) it once when I was a youth and the pictures (to make) a great impression on me. Since then I (not to be) here.
2. You already (to see) the new Indian film? - Yes, I (to see) it. I (to manage) to see it yesterday. I (to go) to the cinema in the evening and (to get) two tickets easily.
3. You always (to take) books from our library? - Yes, as a rule, I (to take).
4. I (not to see) Jane lately. When you (to see) her last? -1 (to meet) her two days ago. I (to think) that she (to change) very much.
5. You (to have) dinner already? -No, not yet. The waitress (to take) my order fifteen minutes ago and (not to bring) me anything yet.
6. Where you (to get) this fine new bicycle from? - My parents (to give) it to me as a birthday present.

VI.        Choose the correct variant

1. I want to go shopping but if you \_\_\_\_\_\_ to come, you

*-want, need            -not want, needn't          -don't want, needn't          -do want, needn't*

2. If you \_\_\_\_\_\_ on this tram it'll take you to the downtown.

*-  'll get                     - have got                      - got                                   -get*

3. He \_\_\_\_\_\_ to the country tomorrow if the weather is fine.

- go                            -goes                            - 'll go                                 -'d go

 4. You'll understand nothing unless you \_\_\_\_\_\_ the book yourself.

*-  read                         -won't read                    -don't read                        - 'll read*

5. You'll understand this rule after your teacher \_\_\_\_\_\_ it to you.

*- 'll explain                - explain                         -explains                           - don't explain*

**Задание №4**

1. Translate the text.

**Electric currents and their properties**

       Conduction is the name normally given to a movement or flow of charges. The charges are usually electrons, but may also be ions when the conduction takes place in gaseous or liquid conductors, in which the ions are mobile.

      How does the current flow through a wire? A metal is made up of tiny crystals which are visible under a microscope. A crystal is a regular and orderly arrangement of atoms. As it was explained, an atom is a complex particle in which tiny electrons move around nucleus. When the atoms are tightly packed as they are in a metallic solid, some of the electrons move freely between the atoms. These are called free electrons. Ordinarily, the free electrons move at random through the metal. There must be some driving force to cause the electrons to move through the metal conductor. This driving force tending to produce the motion of electrons through a circuit is called an electromotive force or e.m. f. that moves electric charges from one point in the circuit to another.

     When an electromotive force is applied to the ends of a wire the free electrons move in one direction. It is the movement of the free electrons in a conductor that induces an electric current. The greater the number of participating electrons, the greater is the flow of current.

     No one has ever seen analectic current. We only know of the existence of a current by its effects. A current can heat a conductor, it can have a chemical action when passing through a solution, or it can produce a magnetic effect. We can measure currents by observing their heating, their chemical, or their magnetic effects.

    There are some kinds of current, namely: a direct current (d. c, for short), an alternating current (a. c.) a pulsating current

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Галогенные лампы стали применять и в быту, так как оказались достаточно экономичными и удобными в эксплуатации. Галогенная лампа, в сущности, является лампой накаливания, только вместо вакуума в ней находится специальная смесь, как правило, содержащая бром или йод, которая повышает светоотдачу лампы. При той же мощности, что и лампа накаливания, галогенная лампа имеет меньшие размеры, светит более ярко.

IV.        Fill in the prepositions:

      It was two o'clock when John went ... the dining-room to have dinner. Peter was already there. He sat ... a table with a book ... his hands. John took the menu ... the next table. When the waitress came, he ordered some soup and meat. "Can you bring me some white bread?" asked John. "Yes, of course, I can", answered the waitress, "I shall bring you some ... a minute". She came back ... a few minutes. "What will you have ... dessert?" she asked. John asked her to bring him some ice-cream. "I'm sorry", said the waitress. "It will only be ready ... half an hour".

V.        Put these sentences in the Future and in the Past:

1. The tourists are shown many places of interest in our town.
2. The Moscow University is greatly admired by everybody.
3. New metro station is built in our town.
4. The poem is recited in our group.
5. We are told to wait outside.

VI.        Use the Past Indefinite or the Past Perfect:

1. They (to complete) all the preparation for the fancy-dress ball by 5 o'clock.
2. On leaving the hospital the man (to thank) the doctor who (to cure) him of his disease.
3. In the morning all the passengers (to feel) good after the night they (to spend) in the comfortable sleeper.
4. During my last visit to the picture gallery I (to find) that I no longer (to like) the pictures which (to impress) me when I first (to see) them. Evidently my taste (to change).
5. Last night he (complete) the experiment which he (to begin) some months, before.
6. They (to be) friends for some ten years before I (to meet) them.

**Задание №5.**

1. Translate the text.

       Conductors, insulators, semiconductors Conductors are materials that have a large number of loosely bound valence-ring electrons; these electrons are easily knocked out of their orbit and are then referred to as free electrons. Insulators are materials in which the valence-ring electrons are tightly bound to the nucleus. In between the limits of these two major categories is a third general class of materials called semiconductors.

**Capacity**

     When two insulated conductors, one of which is charged, are brought into contact, the charge spreads over both conductors. The uncharged conductor becomes charged. A larger conductor receives a larger part of the charge. The potential of the two conductors becomes the same as soon as they are brought into contact, but the quantity of electricity is not the same on each. The larger portion of the charge is on the larger conductor.

      We say that the conductors have not the same capacity for electricity. The capacity of the conductor depends upon its size.

    The capacity of the conductor is measured by the quantity of electricity which must be given to it in order to raise its potential to a given amount.

    From this definition it is seen that if the capacity of a conductor increases while the quantity of electricity on it remains constant, its potential will become less.

**Condenser**

     Any arrangement by which the capacity of a conductor is increased artificially is called a condenser.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Техника безопасности:

Ни в коем случае нельзя одновременно дотрагиваться до бытовых приборов и заземленных предметов (водопроводные трубы, батареи центрального отопления и т. д.). Вполне возможно, что на корпус бытового прибора пробивает электричество. В последнее время все больше и больше приборов имеют заземление. Это делается для обеспечения безопасности потребителей. Такие бытовые приборы имеют трехжильный шнур и вилку с тремя контактами.

IV.         Fill in the blanks with the articles *a, an, the*where necessary.

I have ... hobby. I like to cook. During my leisure time I make … cakes and pies. It is not difficult to make ... pie. Sometimes my brother helps me. He is ... good boy and we get along well with ...  each other. My brother usually goes ... shopping and buys ... different things, which are necessary for ... cooking. My cakes are tasty but I like ... pies ... best of all.

V.        Use the Present Indefinite or the Present Perfect.

1. As a rule I (to have) ham and eggs for breakfast, but this time I (to order) an omelet.
2. This is the house where I (to live). I (to live) here since childhood.
3. Once in a week I (to write) letters home, but I (not to write) one this week, so my next letter must be particularly long.
4. Where (to be) your monitor? "She (to go)" to the library.
5. I regularly (to see) him every morning at the tram stop, but I (not to see) him these two or three days.
6. It (to be) cold in winter in Moscow as a rule? - Yes, generally it (to be), but this winter (to be) exceptionally warm.
7. Why you (not to shave) in the morning?-I (to shave) every other day.

VI. Use the Passive Voice.

A guide will show the visitors the new buildings.

Someone told him to make a report on ancient architecture.

Mr. Smith taught her Greek and gave her a dictionary.

The teacher told John to learn the alphabet.

I will tell you another fable next time.

They invited the rest of us to go sightseeing.

The guide showed the American the Houses of Parliament.

**Задание №6**

I.        Translate the text.

**Potential and difference of potential**

         Two bodies oppositely charged have a difference of potential or voltage is measured by the work required to carry a unit of positive charge from one body to another against the force of attraction or repulsion. The magnitude of the difference of potential depends upon the concentration of the charge and not on the amount of the charge.

        If appositively charged body and a negatively charged body are brought in contact, electrons from the body with negative charge will move over to the body having the positive charge until an equilibrium of charge has taken place.

       There is a very instructive analogy between the use of the word "potential" in electricity and "pressure" in hydrostatics. Just as water tends to flow from points of higher hydrostatics pressure to points of lower hydrostatic pressure, so electricity tends to flow from points of higher electrical pressure, or potential, to points of lower electrical pressure, or potential.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III.  Translate technical terms and phrases.

Аналоговые электроизмерительные приборы

Амперметры, ваттметры, вольтметры, измерительные преобразователи, индукционные, счетчики, контрольно-измерительные приборы, магнитодинамические приборы, магнитоэлектрические приборы, мультиметры, омметры, приборы выпрямительного типа, термоэлектрические приборы, фазометры, ферродинамические приборы, частотомеры, цифровые электроизмерительные приборы, электрические счётчики, электромагнитные приборы, электростатические приборы.

IV. Supply  *many, much* or  *little, a little*.

When we came to the dining-room there were ... people there already. We sat down at a table, took the menu-card and began to read it. "I shall not eat ... today", said. "...  soup, some milk and ... cake-nothing else". "I never eat very ... said Mary.  "But today I am hungry, and I want to eat as ... as I can: soup, meat, fish and potatoes". "But it will take a lot of time", said Peter, "and we have very ... time, you know. We have ... things to do before the lecture begins".

V.        Fill in the prepositions where it is necessary.

        This writer is known all ... the world. Many people are fond ... his books. I read one of his novels ... a month ago. He tells his stories ... such a way that you remember them ... a long time. Although his characters are imaginary it always seems that they live ... real life.  ... the beginning of the year they made a trading expedition …  Africa.  Crusoe, left ... saying good-bye to anyone. .. . his way ... London he had his first experience ... a shipwreck. The ship ran ... a rock and broke ... pieces. The sailors were swallowed ... the sea.

VI.        Use the Present Continuous instead of the infinitives given in brackets:

1. Look the sun (to rise). It is (to shine) brightly.
2. John (to polish) his boots and his sister (to press) her dress.
3. It (to rain)? Yes, it (to rain) very hard. 6. The delegation (to leave) Moscow tomorrow.
4. What you (to read) now? I (to read) stories by Maugham.
5. 10 The weather is fine. The sun (to shine) and the birds (to sing).
6. Why you (to speak) so fast?
7. Who you (to wait) for? I (to wait) for my sister.

Задание  **№7**

I.    Translate the text.

**Unit of electrical current and current measurement**

       The electron is an extremely small unit, and for thus reason it is not a convenient unit to use in the measurement of electric current or of quantity of electricity. The presence of an electric current in a circuit may be detected and its strength may be measured by a number of different methods. Each method is based upon some effect which the current produces under given conditions.

     One of these effects is known as electrolytic dissociation. The properties of most conducting liquids are such that when a direct current is maintained in them, the constituent elements of the liquid are separated. For example, when two copper plates are dipped in a solution of copper sulphate and a direct current is maintained in a liquid entering at one plate, the anode, and leaving at the other, the cathode, metallic copper leaves the solution and is deposited on the cathode.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III.Translate the text.

Техника безопасности:

Чтобы обезопасить себя от воздействия электричества, принято работать в резиновых перчатках или стоять на резиновом коврике. Электрики (как, впрочем, и не электрики) берутся починить розетку или другой электрический прибор, не отключая ток. В таком случае они обязаны выполнять только одно правило: не замыкать собой электрическую цепь. Поэтому они не должны касаться каких-нибудь проводников электричества, а также обоих контактов электрического провода одновременно.

IV.        Fill in the blanks with the preposition required. Translate the sentences into Russian.

... week-days we work. We rest ... Sundays. I get up ... the morning. We sleep ... night. She promised to do this work ... time. We have our vacation ... January. We live ... the twentieth century. We tell the ... a clock or a watch. Our child is in the fresh air ... morning ... night. My father comes home ... noon.

V.        Use the Present Simple or the Present Progressive:

1. Why you (walk) so fast today? You usually (walk) quite slowly.-1 (hurry). I am afraid to miss the train.
2. Cuckoos (not to build) nests. They (to use) the nests of other birds. 3.1 always (to buy) lottery tickets, but I seldom (to win)
3. You cannot (to have) the book now because my brother (to read) it.
4. Some people (to do) everything with their left hand.
5. Who (to make) that terrible noise?-It is my son.
6. How you (to feel)?

VI.        Use an adjective or a proverb.

1. What is the (proper) answer to this question?
2. If you read this joke (proper) you will understand it.
3. It was a (gay) song and she sang it (gay).
4. She spoke very (good) and everybody wondered where she had learnt to speak so fluently
5. She was (kind) to him and he was (happy).
6. The children were running among the trees laughing (happy).
7. He is a very (careful) driver.

 **№8**

1. Translate the text.

**How does it work?**

       It takes billions of electrons to make electricity operate. Electrons move through an electric wire in much the same way water moves through a garden hose. Turning on the faucet pushes the water through the hose. Pushing electrons makes electricity move through the wire.

The machine that pushes the electrons through the wire is called a generator. The wire from the generator goes to your home and into a control center, which is either a fuse box or a circuit breaker.

     The fuse box controls how much electricity you use. If you try4o use too much, you will "blow a fuse", and the electricity from that fuse will be cut off. A circuit breaker works differently from a fuse box. A circuit breaker does not let you use too much electricity. It cuts off the flow before there's an overload.

     If you did not have a fuse box or circuit breaker, your electric wires could overheat and start afire!

    From the fuse box or circuit breaker, the wires go inside your walls to light switches and sockets. Turning on the light switch lets the electricity flow to the light, and the light goes on. When you put a plug into a socket, electricity comes to the socket. But it doesn't flow into the lamp until the switch is turned on.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III.Translate the text.

Техника безопасности:

Ни в коем случае нельзя одновременно дотрагиваться до бытовых приборов и заземленных предметов (водопроводные трубы, батареи центрального отопления и т. д.). Возможно, что на корпус бытового прибора пробивает электричество. В последнее время все больше и больше приборов имеют заземление. Это делается для обеспечения безопасности потребителей. Такие бытовые приборы имеют трехжильный шнур и вилку с тремя контактами.

IV.         Supply **somebody, anybody, nobody, (no one, none), something, nothing, everybody,
everywhere nowhere, somewhere, anywhere**where required.

1. Good morning...! 2. He never goes by train: he goes ... by plane. 3. There is ... here. 4. He did … all day yesterday. 5. They want chairs. They have ... to sit. 6. ... of the pupils will go to school. It is too cold. 7.  ... is coming to see us. 8. She will tell us ... about her holidays.9. He will go ... to have a little rest. 10. Is ... coming to inspect us? 11. Have you ... interesting to tell us? 12. Haven't you ... to go?

V.         Replace the infinitives given in brackets by the Past Indefinite or the Past Continuous.

1. John (to write) the label when the bell (to ring) and a short man (to enter). A dog (to follow) him.
2. There (to be) silence while the man (to look) John up and down.
3. I (to see) the light in your windows as I (to pass).
4. During the dinner while he (to eat) his piece of cold meat, his aunt (to help) herself to wine.
5. While he (to read) a newspaper she (to sit) studying him, and by the look in her eyes he (to see) that she (to reflect) on something concerning him.
6. Jim half (to dream) still when he (to come) to the place of his destination.

VI.        Choose the correct variant

1. I want to go shopping but if you \_\_\_\_\_\_ to come, you

*-want, need            -not want, needn't          -don't want, needn't          -do want, needn't*

2. If you \_\_\_\_\_\_ on this tram it'll take you to the downtown.

*-  'll get                     - have got                      - got                                   -get*

3. He \_\_\_\_\_\_ to the country tomorrow if the weather is fine.

- go                            -goes                            - 'll go                                 -'d go

 4. You'll understand nothing unless you \_\_\_\_\_\_ the book yourself.

*-  read                         -won't read                    -don't read                        - 'll read*

5. You'll understand this rule after your teacher \_\_\_\_\_\_ it to you.

*- 'll explain                - explain                         -explains                           - don't explain*

1. Translate the text. Задание №9

**Kinds of circuits**

      Circuits can be divided into four classes: series, parallel, combination of serial-parallel, and network.

Series circuits are those having one closed path for the flow of electricity. All the elements, or devices which make up the circuit are connected in tandem, one after the other, so that the end of one is connected to the beginning of the other; or, in other words, the positive terminal of one is connected to the negative terminal of another. If the series circuit is opened anywhere, the current will not flow through the circuit.

     A parallel circuit is one divided into two or more branches, each brand carrying part of the current. Another way of saying the same thing is that all the elements or devices are connected so that one half of the terminals are fastened to a common conductor, and the other half are fastened to another common point, or another conductor.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Перегрузка электрической сети является одной из самых распространенных причин короткого замыкания. Короткое замыкание может произойти и из-за воздействия влаги.

Электроустановочные устройства – розетки и выключатели  также должны быть влагозащищенными.  Внутренняя проводка, а если это невозможно, то внешняя проводка должна быть хорошо изолирована.

IV.        Fill in the blanks with the articles ***a, an, the***where necessary.

I have ... hobby. I like to cook. During my leisure time I make ... cakes and pies. It is not difficult to make ... pie. Sometimes my brother helps me. He is ... good boy and we get along well with

... each other. My brother usually goes ... shopping and buys ... different things, which are necessary for ... cooking. My cakes are tasty but I like ... pies ... best of all.

V. Fill in the prepositions.

It was two o'clock when John went ... the dining-room to have dinner. Peter was already there. He sat ... a table with a book ... his hands. John took the menu... the next table. When the waitress came, he ordered some soup and meat. "Can you bring me some white bread?" asked John. "Yes, of course, I can", answered the waitress, "I shall bring you some ... a minute". She came back ... a few minutes. "What will you have ... dessert?" she asked. John asked her to bring him some ice-cream. So they took some milk, paid ... their dinner, and went out ... the street.

VI.        Use the Future Perfect where possible:

1. I am afraid we (not to solve) all the problems by the time they (to come).
2. Let me know as soon as you can (to make) an appointment with him.
3. After the clerk (to decode) the telegrams he (to take) them to the chief.
4. I am sure he (to throw) some light upon this matter before I (to learn) about it from my sister's letter.
5. The secretary (to look through) all the papers by the time the director (to come).
6. Do not start arguing until you (to hear) what I have to say.
7. If you do not hurry, the train (to leave).

 **№10**

I.  Translate the text:

**Measuring devices**

**Ammeters and Volt meters**. - Ammeters measure the current flowing in a circuit and normally have scales which are graduated or calibrated in amperes, milliamperes or microamperes.

      **Voltmeters** are used to measure the potential difference between two points in a circuit. The calibration of voltmeters is usually in volts, millivolts or microvolts.

     The main difference between the two instruments of the same type or design is in the
resistance of the operating coil, identical moving units may be used for either meter. An ammeter
is connected in the positive or negative lead in series with a circuit and, therefore, must have a
low resistance coil, otherwise the readings will be incorrect as the coil would absorb an
appreciable amount of power.

      A voltmeter is connected in parallel across the points of a circuit where the difference of potential is to be measured. The resistance of the operating coil must, in this instance, be as high as possible, to limit the amount of current consumed by it, or else a drop in potential due to the meter would occur and the pointer indication would not represent the true potential difference across the circuit.

**Wattmeters**.- The measurement of the power in a D. С circuit at any instant can be achieved by means of an ammeter and voltmeter as the power in watts is the product of the current and the voltage. With A.C. circuits, however, the instantaneous values are always changing. To measure A.C. power correctly, therefore, it is necessary to use the third instrument to measure the phase difference. The normal practice, however, is to combine these three instruments in one which will give a direct reading of power in watts.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III.Translate the text.

Электроинструменты:

Как правило, в инструментах электричество используется для вырабатывания механической энергии, однако есть и такие инструменты, которые вырабатывают тепловую энергию: паяльник, калорифер.

IV. Fill in the prepositions where it is necessary.

This writer is known all ... the world. Many people are fond ... his books. I read one of his novels ... a month ago. He tells his stories ... such a way that you remember them ... a long time. Although his characters are imaginary it always seems that they live ... real life.  ... the beginning of the year they made a trading expedition ... Africa. Crusoe left ... saying good-bye to anyone.  ...  his way ... London he had his first experience ...  a shipwreck. The ship ran ... a rock and broke ... pieces. The sailors were swallowed…the sea.

V. Replace the infinitives given in brackets by the Past Indefinite or the Past Continuous

1. John (to write) the label when the bell (to ring) and a short man (to enter). A dog (to follow) him.
2. There (to be) silence while the man (to look) John up and down.
3. I (to see) the light in your windows as I (to pass).
4. During the dinner while he (to eat) his piece of cold meat, his aunt (to help) herself to wine.
5. While he (to read) a newspaper she (to sit) studying him, and by the look in her eyes he (to see) that she (to reflect) on something concerning him.
6. Jim half (to dream) still when he (to come) to the place of his destination.

VI.        Change the verbs in bracket by Gerunds. Put prepositions where necessary.

I  have no intention ... (to stay) here any longer.  She insisted ... (to help) me. Are you fond of

 ... (to play). They have had very much experience ... (to cast). There was no possibility ... (to come) in time. There is little chance ... (to see) him today. We have the pleasure ... (to invite) them to the evening party. We are proud ... (to fulfill) that task ahead of time.

**№ 11**

1. Translate the text.

**What is electricity?**

       Have you ever gotten a shock when you touched a doorknob, or seen sparks fly when you combed your hair? That's electricity.

        Electricity is a type of energy that gives things the power to work. This energy comes from electrons. Scientists have learned how to use electrons to produce electricity.

**Meghometer**

       The most commonly used apparatus for insulation resistance is the meghommeter or "megger". The device is easy to handle. It consists of a hand-driven generator in a permanent magnet frame which causes a moving coil to register the insulation resistance in ohms or megohms, the amount of which is indicated by a pointer.

      The "megger" is also used for continuity, ground, and short-circuit testing in general electrical power work.

**Electricity- Sound and Light**

      Flip a switch and a light goes on. It's simple, right? Wrong! Every time you flip a light switch, you make billions of little electrons go to work for you. Uncountable hours of work have gone into providing you with the electricity you need to turn that light on. Without electricity you wouldn't have telephones, television, video games, and many other things you use every day.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III.Translate the text.

Техника безопасности:

Чтобы обезопасить себя от воздействия электричества, принято работать в резиновых перчатках или стоять на резиновом коврике. Электрики (как, впрочем, и не электрики) берутся починить розетку или другой электрический прибор, не отключая ток. В таком случае они обязаны выполнять только одно правило: не замыкать собой электрическую цепь. Поэтому они не должны касаться каких-нибудь проводников электричества, а также обоих контактов электрического провода одновременно.

IV.   Fill in the blanks with the articles ***a, an, the*and*prepositions*,**where necessary:

We live in ... nice flat ... new house near ... park. ... flat is on ... second floor. There are ... two rooms in it. We have also ... kitchen and ... bathroom ... kitchen is ... big enough. As ... rule, my mother cooks for us. We spend ... lot of ... time together in ... kitchen. There is ... TV set in

...  corner of ... kitchen, and we often watch ... TV there The young scientist shook hands ... his friends who had come ... the airport to see him ...

V.          Fill in blanks with the Past Progressive or the Past Simple Tense of the verbs in margin.

1. I ... a letter to my friend yesterday .                                         write

2. We ... to a lecture yesterday at ten o'clock.                                          listen

3. She ... the piano from 11 till 12 o'clock.                                       play

4. When he ... in, I ... my exercises.                                                   come, do

5. What ... you yesterday at 8 o'clock?                                    do

6. Yesterday when I ... the newspaper, my sister ... to a concert over the radio.             read, listen

7. She ... out of the window when I ... her.                                               look, see

VI.  Choose the correct word form those given in brackets:

1 .When I saw that actress on the stage for the first time, she (to look like, to take after) a small girl. From her biography I learnt that she (to look like, to take after) her mother, who had also been a great actress. 2. If you want some information on trade, go to the Ministry library. There are a lot of good (magazines, journals) on the subject there. 3. After coming home from work, my father likes to spend an hour reading (a newspaper, a magazine).

 **№ 12**

1. Translate the text.

**How electrical energy is produced**

     There are several methods of producing electricity for practical purposes. The battery of a pocket torch may be contrasted with the source of enormous energy represented by a larger power station. Both are examples of the application of electrical energy to a particular purpose, and in general the purpose determines the nature of the method used to produce the energy. Practical methods of producing electricity may be enumerated as follows:

     1. **Chemical**, as represented by the various types of batteries or primary cells in which the electricity is produced by purely chemical actions.

     2. **Electromagnetic**, forming the basis of operation of rotating generators in which the electricity is produced by conductors moving through a magnetic field.This is the method employed in practice for generators of various sizes.

   3. **Thermo-electric**, in which the heating of the junction between two different metals produces a very small voltage which may be used for purposes of temperature measurement and as a source of power.

    4.   **Piezo- electric**, in which a very small voltage is produced across certain faces of a crystal by application of mechanical pressure. This effect is used, for example, as a means of frequency control in radio oscillators or for gramophone pick-ups, but it is not suitable for power supply.

    5.  **Electronic,** characterized by the flow of electrons through evacuated or gas-filled tubes, and having the following forms: a) thermionic emission, in which the electrons are produced by the heating of special materials; b) photo- electric emission, in which electrons are liberated at the surface of certain substances by the action of light; c) secondary emission, in which electrons are driven from a material by the impact of electrons or other particles on its surface; d) Field emission, in which electrons are drawn from the surface of a metal by the application of very powerful electric fields.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Техника безопасности:

Бытовые приборы, имеющие защиту от воздействия влаги, имеют специальную маркировку, однако это вовсе не значит, что не следует быть внимательным. Всегда помните о том, что сочетание воды и электричества очень опасно.

IV.  Fill in the blanks with prepositions and adverbial particles where necessary:

1 .Instead  ... buying something ... everyday wear, as she had first intended, Mary bought

a  ... sleeveless dress... better waer.2. I don't advise you to buy this pair ... shoes. I am afraid

they’ll soon wear... .3. I wonder why the water has set the table ... two persons instead ... three.  4. Speaking at the production meeting, the director ... the factory pointed ... that each ... the workers and engineers was responsible ... carrying ... the plan.

V.    Use the Past Indefinite or the Past Perfect.

1. They (to complete) all the preparation for the fancy-dress ball by 5 o'clock.
2. On leaving the hospital the man (to thank) the doctor who (to cure) him of his disease.
3. In the morning all the passengers (to feel) good after the night they (to spend) in the comfortable sleeper.
4. During my last visit to the picture gallery I (to find) that I no longer (to like) the pictures which (to impress) me when I first (to see) them. Evidently my taste (to change).
5. Last night he (complete) the experiment which he (to begin) some months before.
6. They (to be) friends for some ten years before I (to meet) them.
7. No sooner she (to open) the drawer than she (to find) the photo which she (to think) she (to lose) long before.

VI.        Change the verbs in bracket by Gerunds. Put prepositions where necessary.

I have no intention ... (to stay) here any longer.  She insisted ... (to help) me. Are you fond of ... (to play).  They have had very much experience ... (to cast). There was no possibility ... (to come) in time. There is little chance ... (to see) him today. We have the pleasure ... (to invite) them to the evening party. I think ... (to go) to the South in summer. We are proud  ... (to fulfill) that task ahead of time. They had not any difficulty ... (to get) new machines.

 **№13**

1. Translate the text.

**Direct current generations and their applications**

       The Essential difference between a d.c. generator and a. c. generator is that the former has a commutator by means of which the generated e. m. f. is made continuous, i. е., the commutator mechanically rectifies the alternating e. m. f. so that it is always of the same polarity. This is not, however, the only difference between them.

       A d.c. generator as well as a motor of conventional type is made up of the following parts: outer frame, or yoke, pole cores, pole coils, armature windings, commutator, bruches, and bearings. Of these, the yoke, pole cores, armature core and the air gap between armature and pole core form the magnetic circuit while the pole coils, armature windings, commutator, and brushes form the electric circuit.

      Generator fields may be either of two main types-separately excited or self- excited. The self-excited type is further, classified as series-wound, shunt-wound and compound-wound. In general practice compound-wound machines are used.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Величина электрического тока (количество переносимого заряда) измеряется в амперах. Напряжение, т. е. разность потенциалов, которая заставляет течь ток (ЭДС – электродвижущая сила), измеряется в вольтах.

IV.  Fill in the blanks with the articles *a, an, the*  and *prepositions,* where necessary.

When Mary was to open a meeting ... the first time ... her life, her voice shook ... excitement. The young scientist shook hands ... his friends who had come ... the airport to see him ... .  I wonder why Bob is such an ill-natured boy. It's a pity he takes ... his mother only ... appearance! Ask Kate to join ... our party. She looks serious, but I know she is very gay ... nature and is fond of ... singing and dancing.

V.   Put the verbs in brackets into the correct voice and tense-forms:

1. Don't let the boy stay out so long. He (to run about) for three hours, and may catch cold. 2. That young singer has had very good training. He (to sing) for half an hour and never (to stop) for a moment to rest.  3. It is unfair of you to be so cross with the man. He (to be) away for two weeks and you can't blame him for few mistakes that (to make) during his absence.

VI.   Use the Future Perfect where possible:

1. I hope that they (to receive) my letter by Saturday and (not to expect) me on Sunday.
2. Let me know as soon as you can (to make) an appointment with him.
3. After the clerk (to decode) the telegrams he (to take) them to the chief.
4. The secretary (to look through) all the papers by the time the director (to come).
5. Do not start arguing until you (to hear) what I have to say.
6. I suppose that when my letter (to reach) you, you (to return) from your voyage.
7. If you do not hurry, the train (to leave).

 **№14**

1. Translate the text.

**Industrial application of D.C. generators.**

       D.C. generators are used for electrolytic processes such as electroplating. We know that large d.c. generators are employed in certain manufacturing processes, such as steel making.

The d.c. generator of small capacities is used for various special purposes such as arc welding, automobile generators, train lighting systems, etc. It also finds rather extensive use in connection with communication systems.

     For supplying direct-current power networks, the supply comes first from an alternating-current source and is converted to direct current by synchronous convenors or motor-generator sets.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III.а) Find in the text English equivalents:

-производство стали

-малых мощностей - дуговая сварка

-силовые сети постоянного тока - энергия поступает

    b) Translate the text.

Атомы любого вещества располагаются на некотором расстоянии друг от друга. В металлах расстояния между атомами настолько малы, что электронные оболочки практически соприкасаются. Это дает возможность электронам свободно блуждать от ядра к ядру, создавая при этом электрический ток, поэтому металлы, а также некоторые другие вещества являются проводниками электричества.

IV.Fill in the blanks with the articles *a, an, the*  and prepositions, where necessary:

We live in ... nice flat...new house near … park. ... flat is on ... second floor. There are ... two rooms in it. We have also ... kitchen and ... bathroom, kitchen is... big enough. As ... rule, my mother cooks for us. We spend ... lot of...time together in … kitchen. There is...TV set in ... corner of ... kitchen, and we often watch ... TV there.

V.   Put the verbs in brackets into the correct voice and tense-forms:

1. I  not (write) this letter now. I (write) it in some days.
2. Peter and Ann (go) away five minutes ago.
3. She already  (answer)  the letter.
4. I  (not see) him for three years.
5. You (switch off) the light before you left the house?
6. I (not meet) him last week.
7. I read these books when I was at school. I (like) them very much.
8. He (not smoke) for a month. He is trying to give it up.

VI.   Fill in the blanks with prepositions and adverbial particles where necessary:

1. Instead ... buying something ... everyday wear, as she had first intended, Mary bought a ... sleeveless dress ... better wear. 2. I don't advise you to buy this pair...shoes. I am afraid they'll soon wear ... 3. I wonder why the water has set the table  ... two persons instead ... three.

4. Speaking at the production meeting, the director … the factory pointed ... that each ... the workers and engineers was responsible ... carrying  ... the plan.

 **№ 15**

1. Translate the text:

**The compound motor**

     The features of the shunt and series type of motors may be combined in one machine by providing both series and shunt windings for the field. This arrangement gives the compound motor. There are two windings on each field pole; a heavy or series winding for carrying the armature current, and a shunt winding connected to the supply. Each winding is formed by the series connection of the corresponding coils, and the fields due to the respective windings aid each other.

    Speed control of a compound motor may be obtained by means of resistance in the field or armature circuit, as in the case of the shunt motor.

    The compound motor may be regarded as having a higher starting torque than a shunt motor and a more constant speed under changing load conditions than the series motor. Either feature may be emphasized by varying the proportion of the total field strength due to each winding.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. а) Find in the text English equivalents:

- используя обмотки как последовательного, так и параллельного возбуждения для создания поля

-соединенный с источником питания - регулировка числа оборотов

b) Translate the text:

Вещества, которые имеют далеко расставленные атомы, электроны, прочно связанные с ядром, которые не могут свободно перемещаться. Такие вещества не являются проводниками и их принято называть диэлектриками, самым известным из которых является резина. Это и есть ответ на вопрос, почему электрические провода делают из металла.

IV. Fill in the blanks with the articles *a, an, the* and prepositions, where necessary:

1. What  ... fine day it is today! *2.  ...*History and Computer Science were ... my favorite subjects at ... school. 3.1 don't know  ... way to ... station. 4. He is ... engineer by ... profession. 5. Usually I get up at ...7 o'clock in ...morning. 6. ...Rostov is on ... right bank of... Don. 7. Will you have ...cup ... of tea?  8. ...Warsaw is ... capital of Poland. 9. We shall go to ... cinema together with ... our friends. 10. This is ... book  ... book is very interesting. 11. Do you see ... sun in ... sky today?

V. Put the verbs in brackets into the correct tense-forms:

1. He (know) several foreign languages.
2. Our grandparents (live) now in Moscow.
3. He often (visit) them last year.
4. She (work) abroad next year.
5. She (not like) loud music.
6. What you (do) yesterday?
7. His sister (go) to the seaside next July.

V.        Fill in the blanks with prepositions and adverbial particles where necessary:

1. Instead  ... buying something ... everyday wear, as she had first intended, Mary bought a ... sleeveless dress ... better wear. 2. I don't advise you to buy this pair ... shoes. I am afraid they'll soon wear.... 3.1 wonder why the water has set the table ... two persons instead ... three.

4. Speaking at the production meeting, the director ... the factory pointed ... that each ... the workers and engineers was responsible ... carrying  ... the plan. 5. She said that the new film was worth seeing, but there was such an expression ... her face that I thought she was saying it only ... fun.

 **№ 16**

1. Translate the text:

**Transformers**

      One of the great advantages in the use of the alternating currents is the ease with which the voltage may bechanged by means of a relatively simple device known as a transformer. Although there are many different applications, the principles of action are the same in each case.

     The basic arrangement consists of a laminated iron core forming a closed magnetic circuit on which two separate windings are mounted. One winding, called the primary, is connected to the a.c. supply, and the other winding, the secondary, produces a voltage which can have any desired value if the respective windings are suitably designed.

    The transformer relies for its action upon the fact that when a magnetic field passing through a coil is changed or varied a voltage is produced in the coil. The amount of this voltage is proportional to the number of turns in the coil and to the rate at which the magnetic field varies.

In general, it is approximately true that the ratio of the primary to the secondary voltage is equal to the ratio of the number of primary turns to the number of secondary turns.  This ratio is not exact because of leakage effects in the magnetic circuit.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. a) Find in the text English equivalents:

* источник переменного тока
* работа трансформатора основана на
* пропорционален числу витков

       b) Translate the text:

Оборудования работающего на основе использования возобновляемых источников энергии для автономного тепло- и электроснабжения частных домов и зданий. С его помощью можно частично или полностью покрыть энергозатраты практически любого объекта.

* солнечные вакуумные водонагреватели для круглогодичного производства горячей воды
* ветрогенераторы для выработки электроэнергии.
* солнечные фотоэлектрические батареи и товары на их основе – зарядные устройства, фонари, энергоэффективные светодиодные лампы.

IV. Fill in the blanks with the articles a, an, the and prepositions, where necessary:

When Mary was to open a meeting ... the first time ... her life, her voice shook ... excitement. The young scientist shook hands...his friends who had com ... the airport to see him....  I wonder why Bob is such an ill-natured boy. It's a pity he takes ... his mother only ... appearance! Ask Kate to join ... our party. She looks serious, but 1 know she is very gay ... nature and is fond of ...  singing and dancing.

V.        Put the verbs in brackets into the correct voice and tense-forms:

1. That young singer has had very good training. He (to sing) for half an hour and never (to stop) for a moment to rest. 2. It is unfair of you to be so cross with the man. He (to be) away for two weeks and you can't blame him for few mistakes that (to make) during his absence. 3. Our reply (to send) to you as soon as all the dates (to fix) finally. At the moment some of them (to consider) still.

VI.        Fill in the blanks with the necessary forms of Modal Verbs:

(*must, should, would, ought to, needn't, can, could, may, might*)

1. They ... not do this work themselves. 2. You ... take my dictionary. 3. You don't look well, you ... consult the doctor. 4. Why ... I give you my money? 5. She ... not speak any foreign language. 6. He ... to help them, they need his help. 7. ... you tell me the time?  8.  ... I go with you? No, you ....

**Контрольная работа № 17**

I.        Translate the text:

**Auto-Transformers**

     The Transformer effect can also be obtained with a single tapped winding instead of separate primary and secondary windings. The arrangement is called an auto-transformer. If the primary winding n 'resents the whole coil, the secondary voltage will be substantially the same proportion of the applied [voltage](http://oltage/) as the proportion between the turns up to the secondary tapping and the total number of turns. By interchanging the voltage so that the supply is connected to the smaller number of turns, a voltage larger than the supply voltage appears across the whole coil. The auto-transformer can thus be used to obtain a higher or lower voltage than the supply, as in the case of the convential transformer with two separate windings.

     In practice, the use of auto- transformers is limited to fairly small voltage ratios, one reason being that if a break occurs anywhere in the secondary section of the winding, the primary Voltage is applied to the apparatus connected to the secondary. With a high primary voltage this would give dangerous conditions. The chief uses of auto- transformers, are in a.c. voltage regulation and for infrequent service such as the low-voltage starting of induction motors.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III.        a) Find in the text English equivalents:

* на одной обмотке с отпайкой
* общее число витков
* запуск асинхронных двигателей на низком напряжении

      b)Техника безопасности:

Бытовые приборы, имеющие защиту от воздействия влаги, имеют специальную маркировку, однако это вовсе не значит, что не следует быть внимательным. Всегда помните о том, что сочетание воды и электричества очень опасно.

IV.  Fill in the blanks with the articles *a, an, the* and prepositions, where necessary:

1.What ... fine day it is today! 2*. ...*History and Computer Science were ... my favorite subjects at ... school. 3. I don’t know ... way to ... station. 4. He is ... engineer by ... profession. 5. Usually I get up at ... 7 o'clock in ... morning. 6. ... Rostov is on ... right bank of... Don. 7. Will you have ... cup ... of tea?  8. ...Warsaw is ... capital of Poland.

V.  Put the verbs in brackets into the correct tense-forms:

1. She (not like) loud music.
2. His sister (go) to the seaside next July.
3. I not (write) this letter now. I (write) it in some days.
4. She already (answer) the letter.
5. I (not see) him for three years.
6. You (switch off) the light before you left the house?
7. I (not meet) him last week.

 **№18**

I.        Translate the text.

**Protection and control equipment**

       In electrical systems for the generation, distribution and use of electrical energy, considerable control equipment is necessary. It can be divided into t\v. classes: A) equipment used at the generating and distributing end; b) equipment used at the receiving end of the system.

Safety switches are used at the point where the power enters the building. They are of the knife type and are usually enclosed in metallic boxes.

      A magnetic contactor is used to make and break the circuit at the points where considerable power used.

      An automatic starter is a device which is used to keep the current from being excessive while the motor is obtaining full speed. It is a kind of a resistance inserted in series with the direct current armature. As the motor obtains speed it gradually removes.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. a) Find in the text English equivalents:

-аварийный выключатель, предохранительный выключатель

-замыкать и размыкать цепь

-предохранять от сверхтоков, от перегрузки

-постепенно выводится

b) Translate the text:

Вещества, которые имеют далеко расставленные атомы, электроны, прочно связанные с ядром, которые не могут свободно перемещаться. Такие вещества не являются проводниками и их принято называть диэлектриками, самым известным из которых является резина. Это и есть ответ на вопрос, почему электрические провода делают из металла.

IV.   Fill in blanks with the Past Progressive or the Past Simple Tense of the verbs in margin.

1. I ... a letter to my friend yesterday.                                                                                            write

2. We ... to a lecture yesterday at ten o'clock.                                                                        listen

3. She ... the piano from 11 till 12 o'clock.                                                                                    play

4. When he ... in, I ... my exercises.                                                                                           come, do

5. What ... you yesterday at 8 o'clock?                                                                                              do
6. Yesterday when I ... the newspaper, my sister ... to a concert over the radio.            read, listen

7. She ... out of the window when I ... her.                                                                       look, see

8. I ... along the street with my friend when the car … by.                                                          walk

9. It ... the whole day yesterday.                                                                                                       rain

V.        Choose the correct word form those given in brackets:

1 .When I saw that actress on the stage for the first time, she (to look like, to take after) a small girl. From her biography I learnt that she (to look like, to take after) her mother, who had also been a great actress. 2. If you want some information on trade, go to the Ministry library. There are a lot of good (magazines, a journals) on the subject there.

VI.        Fill in the blanks with the necessary forms of Modal Verbs:

( *must, should, would, ought to, needn't, can, could, may, might*)

1. They ... not do this work themselves. 2. You ...take my dictionary. 3. You don't look well, you ... consult the doctor. 4. Why ... I give you my money? 5. She ... not speak any foreign language. 6. He ... to help them, they need his help. 7. ... you tell me the time?  8. ... I go with you? No, you ....  9. Your daughter ... have told about it. 10. In winter we ... often skate. 11. You ... not miss your classes. 12. ... you play the piano before?

 **№19**

I.        Translate the text

**Automatic Voltage regulators**

      In the generation and distribution of electrical energy it is important to keep the line voltage constant as the load or speed changes.

      Where the load is changed gradually rheostats are used, in installations where the load may change rapidly automatic voltage regulators are used.

      To protect electrical equipment and the wiring from damage due to short circuits and overloads, fuses or circuit breakers are usually used. The fuse is known to be a device for inserting in the circuit a strip of metal which melts at a relatively low temperature. The fuse will melt if the current gets above a certain limit.

      A circuit breaker is similar to the magnetic contactor.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III.        a) Find in the text English equipment:

- при изменении нагрузки или оборотов поддерживать линейное напряжение постоянным - из-за коротких замыканий и перегрузок

-известно, что плавкий предохранитель представляет собою приспособление
- если ток переходит определенный предел

          b) Translate the text.

Перегрузка электрической сети является одной из самых распространенных причин короткого замыкания. Короткое замыкание может произойти и из-за воздействия влаги.

Электроустановочные устройства – розетки и выключатели  также должны быть влагозащищенными.  Внутренняя проводка, а если это невозможно, то внешняя проводка должна быть хорошо изолирована.

IV.        Change the verbs in bracket by Gerunds. Put prepositions where necessary.

I have no intention ... (to stay) here any longer.  She insisted ... (to help) me. Are you fond of ... (to play). They have had very much experience ... (to cast). There was no possibility ... (to come) in time. There is little chance ... (to see) him today. We have the pleasure ... (to invite) them to the evening party. I think ... (to go) to the South in summer.

V.        Fill in the blanks with the necessary forms of Modal Verbs:

(*must, should, would, ought to, needn't, can, could, may, might*)

1. They...not do this work themselves. 2. You...take my dictionary. 3. You don't look well, you... consult the doctor. 4. Why... I give you my money? 5. She... not speak any foreign language. 6. He...to help them, they need his help. 7. ...you tell me the time?

VI.        Choose the correct variant

1. I want to go shopping but if you \_\_\_\_\_\_ to come, you

*-want, need            -not want, needn't          -don't want, needn't          -do want, needn't*

2. If you \_\_\_\_\_\_ on this tram it'll take you to the downtown.

*-  'll get                     - have got                      - got                                   -get*

3. He \_\_\_\_\_\_ to the country tomorrow if the weather is fine.

- go                            -goes                            - 'll go                                 -'d go

 4. You'll understand nothing unless you \_\_\_\_\_\_ the book yourself.

*-  read                         -won't read                    -don't read                        - 'll read*

5. You'll understand this rule after your teacher \_\_\_\_\_\_ it to you.

*- 'll explain                - explain                         -explains                           - don't explain*

 **№20**

I.        Translate the text:

**Care of the electrical equipment**

     As a rule electrical equipment operates reliably. Still it does not mean that it deserves no attention. It is necessary to give the equipment frequent inspections, keep it well cleaned, lubricated and repaired. Undue heating, vibration, sparking should be immediately removed.

      Heating may be due to overload or to a short circuit between turns, lack of oil in bearings. Vibration may be due to unproper foundation, unbalance in the moving parts of the machine.

     Conductors may get heated because of overload or by reason of damage of the insulation of the conductor.

     An electrical machine of any kind requires certain conditions under which it may operate reliably: temperature and freedom of access of surrounding air, need for protection against dirt, dust, type and duration of load, etc.

Rotating machines should be placed on solid foundations.

Conductors should be protected against mechanical damage.

All measures of safety precaution must be undertaken.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. a) Find in the text English equipments:

- короткое замыкание между витками

- чрезмерное нагревание

- меры по технике безопасности

      b) Техника безопасности:

Ни в коем случае нельзя одновременно дотрагиваться до бытовых приборов и заземленных предметов (водопроводные трубы, батареи центрального отопления и т. д.). Вполне возможно, что на корпус бытового прибора пробивает электричество. В последнее время все больше и больше приборов имеют заземление. Это делается для обеспечения безопасности потребителей. Такие бытовые приборы имеют трехжильный шнур и вилку с тремя контактами.

IV. Fill in the blanks with the articles *a, an, the* and prepositions, where necessary:

When Mary was to open a meeting ... the first time ... her life, her voice shook ... excitement. The young scientist shook hands ... his friends who had come ... the airport to see him.... I wonder why Bob is such an ill-natured boy. It's a pity he takes ... his mother only ... appearance! Ask Kate to join ... our party. She looks serious, but I know she is very gay ...  nature and is fond of ... singing and dancing.

V.        Put the verbs in brackets into the correct voice and tense-forms:

1. Don't let the boy stay out so long. He (to run about) for three hours, and may catch cold. 2. That young singer has had very good training. He (to sing) for half an hour and never (to stop) for a moment's rest. 3. It is unfair of you to be so cross with the man. He (to be) away for two weeks and you can't blame him for few mistakes that (to make) during his absence. 4. Our reply (to send) to you as soon as all the dates (to fix) finally. At the moment some of them (to consider) still.

VI.        Fill in the blanks with prepositions and adverbial particles where necessary:

1. Instead  ... buying something ... everyday wear, as she had first intended, Mary bought a ... sleeveless dress ... better wear. 2. I don't advise you to buy this pair ... shoes. I am afraid they'll soon wear.... 3.1 wonder why the water has set the table ... two persons instead ... three.

4. Speaking at the production meeting, the director ... the factory pointed ... that each ... the workers and engineers was responsible ... carrying  ... the plan. 5. She said that the new film was worth seeing, but there was such an expression ... her face that I thought she was saying it only ... fun.

**Курс 4**

**Контрольная работа №1**

I.      Translate the text.

**Types of Loading**

        As to the manner in which loads are applied or transmitted to a structure of machine they may be considered as static loads, repeated loads, impact and energy loads.

       1 .In static, steady or dead loads are forces that are applied slowly and remain nearly constant after being applied to the body such as the loads on most buildings or the load applied to a bar in the usual type of testing machine.

1. Repeated loads are forces that are applied a very large number of times causing a stress in the material that is continually changing, usually through some definite range. Such are the loads applied to the connecting rod of an engine is running, the wheel loads on a railroad rail as a train passes over the rail and similar ones.
2. Impact loads are forces that are applied to the resisting body in a relatively short period of time. An impact load, in general, is applied by a moving body when it comes in contact with the resisting body. The force exerted by the moving body and the period during which it acts in general cannot be determined. For this reason in some problems it is more satisfactory to calculate the stress and strain produced by an impact load from the energy delivered to the resisting body by the moving body.

       Other Classifications of Loads.-Loads may be classified as distributed loads and concentrated loads. A distributed load may be uniformly distributed or non-uniformly distributed. A concentrated load is one whose area of contact with the resisting body is negligible in comparison with the area of the resisting body.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Зимние шины не рекомендуется эксплуатировать при температуре выше +5 по Цельсию. Они мало того, что становятся мягче и буквально «плавятся», но кроме того еще и не выполняют в полной мере своих функций, устойчивость автомобиля на дороге при этом становится большим вопросом.

IV. Supply *some, any, no,*where required

I.        ... pupils went to the river ... to the woods. 2. ... of my friends live in Moscow. 3. ... have
you ... English dictionaries? 4. Is there ... ink in the inkstand? Yes, there is ... 5. Bring ... chalk,
please. 6. There is ... chalk in the box. 7. Is there ... milk in the jug? Yes, there is....

V. Choose the correct variant

 1. Before you \_\_\_\_, don't forget to lock the door.

  -are leaving                  -will leave                -leave                     -shall leave

 2. Please do not speak to anyone before the police \_\_\_\_ .

  -come                       -are coming                 -’ll come, came

 3. His parents will be very glad if she\_\_\_\_ the university.

  -enter                       -’ll enter                       - enters                    - entered

 4. When you \_\_\_\_ my brother, you \_\_\_\_ him.

  -'ll see;   - won't recognize;    - see won't recognize;    -saw, recognize;    -'ll see, don't recognize

 5. We won't discuss the matter until the headmaster \_\_\_\_\_\_ .

  -'ll arrive                - won’t arrive                - doesn’t arrive-         -arrives

VI .   Replace the infinitives given in brackets by the Past Simple:

1    That boy (break) my window.

 2    I (drive) to work every day last year.

 3    Laura  (hit) that boy.

 4    James (keep) the book about films.

 5    We (meet) them at the same place every week.

 6    You (put) that there.

 7    We  (sit) at the same desks.

 8    An American (win) Wimbledon last year.

**Контрольная работа №2**

I.       Translate the text.

**Four-stroke engine**

         The internal combustion engine is a machine that develops power from the combustion of fuel within a cylinder. The cycle of operation is as follows:

       a) Suction Stroke- Just before the piston reaches the inner dead-centre, a valve, usually of the "poppet" type, is opened.

        On its outward stroke, the piston draws into the cylinder an explosive mixture of air and fuel vapour.

      Shortly before the piston reaches the outer dead-centre, the inlet valve is closed and the compression stroke begins.

1. Compression stroke- During this stroke, the whole of the gas in the cylinder is compressed into the free space at the head of the cylinder.
2. Explosion, or Working Stroke- When the compression stroke is almost complete, the explosive mixture is ignited by an electric spark or by other suitable means. The gases reach their maximum pressure almost immediately, and work is done until the piston has again reached a position just before the outer dead- centre, when a second exhaust valve is opened.

       If the ignition takes place too late, the piston begins its outward journey before the maximum pressure is developed and power is lost.

If, on the other hand, the explosive mixture is ignited too early, the maximum pressure is reached before the piston has completed its inward journey, and engine is slowed down or even stopped.

        d)        Exhaust Stroke- The burnt gases are driven out in front of the and its return until the
inlet valve again opens, when the cycle is repeated.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III.   Translate the text.

Летняя резина, при приближении температуры воздуха к «нулю» твердеет и становится абсолютно «дубовой», что существенно повышает вероятность заноса (даже на относительно сухом покрытии), а также вероятность разрыва колеса при обычном проколе.

IV.  Put in *a/an* or *the* where necessary

1. I wrote to her but ... letter never arrived.

2. Britain is ... island.

3. What is ... name of this village?

4. Jane is ... very nice person. You must meet her.

5. Montreal is ... large city in ... Canada.

6. What is ... largest city in ... Canada?

7. "What time is it?" "I don't know. I haven't got ... watch."

V.   Replace the infinitives given in brackets by the Future Progressive or the Present Simple:

1. The delegation (to start) for London as soon as they (to receive) their visas.
2. At the travel bureau they (to tellO you exactly when the train (to leave).
3. Ask the Smith if it (to take) him long to make a duplicate of this key.
4. I (not to think) I (to be able to) call on them and (to say) good-bye before I (to go) abroad.
5. If you (not to want) to climb the tree you can shake it and the apples (to fall) down to the ground.
6. If I (to go) to Moscow I usually (to stay) at my friends.
7. Ask him when he (to finish) packing.

VI. Определите, какое значение приобретают выделенные слова в контексте следующих предложений. Переведите предложения.

1.   The soldier is now at his post. 2. The man did his best to get a better post.3. I will send you the book by post. 4. The wooden gate was supported by two metal posts.

**Контрольная работа № 3**

I.        Translate the text.

**Two-Stroke engine.**

      This engine differs from the four-stroke engine in having one working stroke during each complete revolution of the crankshaft.

      During the inward stroke of the piston a port leading to the crankcase is uncovered and the explosive mixture of air and fuel is drawn into the crankcase. On beginning its outward stroke, the inlet port is soon covered, and the mixture is compressed in the crankcase to pressure of about 20 lb. per sq. in. As the outer dead- centre is approached the exhaust port is opened, and shortly afterwards another port opens, which allows the partially compressed charge of gas to enter the cylinder, driving out the exhaust gas before it. A baffle in the piston top directs the unburnt charge to the top of the cylinder, thus preventing undue loss through mixing with the exhaust gas.

      The gas is compressed on the inward stroke and is exploded as the piston reaches inner dead-centre.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Инжекторный двигатель существенно улучшает эксплуатационные и мощностные показатели автомобиля (динамика разгона, экологические характеристики, расход топлива). Инжекторные двигатели, безусловно, гораздо совершеннее карбюраторных. Отечественные инжекторные двигатели хорошо адаптированы к нашему холодному климату, поэтому неплохо заводятся при очень низкой температуре.

IV.          Fill in the pronouns.

When Mary came to the dining room ... took off ... coat and sat down. The waitress soon brought ... some soup. When Mary finished ... dinner ... looked at ... watch, put on ... coat and went out. (Say the same about Peter): When Peter ... (Now Mary speaks about herself): "When I ...". (Now Mary and Peter tell us what they did in the dining room when they went their together): "When we ...".

V.        Use the Present Indefinite, the Present Perfect or the Past Indefinite.

1. You ever (to be) to the picture gallery?-Yes, I (to be). I (to visit) it once when I was a youth and the pictures (to make) a great impression on me. Since then I (not to be) here.
2. You already (to see) the new Indian film? - Yes, I (to see) it. I (to manage) to see it yesterday. I (to go) to the cinema in the evening and (to get) two tickets easily.
3. You always (to take) books from our library? - Yes, as a rule, I (to take).
4. I (not to see) Jane lately. When you (to see) her last? -1 (to meet) her two days ago. I (to think) that she (to change) very much.
5. You (to have) dinner already? -No, not yet. The Waitress (to take) my order fifteen minutes ago and (not to bring) me anything yet.
6. Where you (to get) this fine new bicycle from? - My parents (to give) it to me as a birthday present.

VI.        Choose the correct variant

1. I want to go shopping but if you \_\_\_\_\_\_ to come, you

*-want, need            -not want, needn't          -don't want, needn't          -do want, needn't*

2. If you \_\_\_\_\_\_ on this tram it'll take you to the downtown.

*-  'll get                     - have got                      - got                                   -get*

3. He \_\_\_\_\_\_ to the country tomorrow if the weather is fine.

- go                            -goes                            - 'll go                                 -'d go

 4. You'll understand nothing unless you \_\_\_\_\_\_ the book yourself.

*-  read                         -won't read                    -don't read                        - 'll read*

5. You'll understand this rule after your teacher \_\_\_\_\_\_ it to you.

*- 'll explain                - explain                         -explains                           - don't explain*

**Контрольная работа №4**

I.  Translate the text.

**Basic elements of hydraulic systems**

The basic elements of hydraulic systems are:

1. The fluid.
2. The generator element (pump).
3. The transmission element (pipes and connections).
4. The control element (valve or restrictor).
5. The motor element (jack or continuous motor).
6. Tank and filter.

It can only function as a pump while the piston is moving into the cylinder and acts as a motor while the piston moves back. If non-return valves are added, the inlet valve is connected to a tank and the piston is given a to-and-fro motion, the device, becomes a source of continuous supply of liquid, except for interruptions during the suction stroke, which can be avoided by having two or more cylinders and pistons. Thus we obtain continuous pump.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Find in the text English equivalents:

IV.        Fill in the prepositions.

It was two o'clock when John went ... the dining-room to have dinner. Peter was already there. He sat ... a table with a book ... his hands. John took the menu ... the next table. When the waitress came, he ordered some soup and meat. "Can you bring me some white bread?" asked John. "Yes, of course, I can", answered the waitress, "I shall bring you some ... a minute". She came back ... a few minutes. "What will you have ... dessert?" she asked. John asked her to bring him some ice-cream. "I'm sorry", said the waitress. "It will only be ready ... half an hour". So they took some milk, paid ... their dinner, and went out ... the street. John then went ... the library, Peter went home.

V.        Put these sentences in the Future and in the Past

1. The tourists are shown many places of interest in our town.
2. The Moscow University is greatly admired by everybody.
3. New metro station is built in our town.
4. The poem is recited in our group.
5. We are told to wait outside.

VI.        Use the Past Indefinite or the Past Perfect.

1. They (to complete) all the preparation for the fancy-dress ball by 5 o'clock.
2. On leaving the hospital the man (to thank) the doctor who (to cure) him of his disease.
3. In the morning all the passengers (to feel) good after the night they (to spend) in the comfortable sleeper.
4. During my last visit to the picture gallery I (to find) that I no longer (to like) the pictures which (to impress) me when I first (to see) them. Evidently my taste (to change).
5. Last night he (complete) the experiment which he (to begin) some months before.
6. They (to be) friends for some ten years before I (to meet) them.
7. No sooner she (to open) the drawer than she (to find) the photo which she (to think) she (to lose) long before.

8.  I (to refuse) to give a definite answer before I (to receive) a letter from him.

**Контрольная работа №5.**

I.          Translate the text.

**Elementary Hydraulic Systems**

    The simplest hydraulic system is perhaps the hydraulic shock absorber which consists of a pump (piston) and resistance. Another elementary type of system is the hydraulic weighing machine, which consists of a non-continuous pump element(piston or diaphragm) and a pressure gauge.

   Other elementary systems consists of a jack, transmission line, and a pump of the non-continuous type without control gear, although valves may still be present for secondary purposes. Systems of this type are used for remote transmission of manual or pedal effort or motion, or for remote transmission of instrument indication.

    The simplest best known system of this type hydraulic brake.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III.Translate the text.

Основные параметры подшипников:

Максимальные динамическая и статическая нагрузка (радиальная и осевая).

Максимальная скорость (оборотов в минуту для радиальных подшипников).

Посадочные размеры.

Класс точности подшипников.

Требования к смазке.

Ресурс подшипника до появления признаков усталости, в оборотах.

Шумы подшипника

IV.        Fill in the blanks with the articles *a, an, the*where necessary.

I have ... hobby. I like to cook. During my leisure time I make ... cakes and pies. It is not difficult to make ... pie. Sometimes my brother helps me. He is ... good boy and we get along well with ... each other. My brother usually goes ... shopping and buys ... different things, which are necessary for ... cooking. My cakes are tasty but I like ... pies ... best of all.

V. Use the Present Indefinite or the Present Perfect.

1. No wonder he (to look) tired after the strain under which he (to be) lately.
2. She just (to ask) a porter to carry her as they (to be) too heavy for her.
3. Where (to be) your monitor? "She (to go)" to the library.
4. I regularly (to see) him every morning at the tram stop, but I (not to see) him these two or three days.
5. It (to be) cold in winter in Moscow as a rule?- Yes, generally it (to be), but this winter (to be) exceptionally warm.
6. Why you (not to shave) in the morning?-I(to shave) every other day.

VI.        Use the Passive Voice.

1. A guide will show the visitors the new buildings.
2. Someone told him to make a report on ancient architecture.
3. Mr. Smith taught her Greek and gave her a dictionary.
4. The teacher told John to learn the alphabet.
5. I will tell you another fable next time.
6. They invited the rest of us to go sightseeing.

**Контрольная работа №6**

I.        Translate the text.

**Tubing, Tube Connectors, and Flexible Hose**

    The various units of a hydraulic system are connected with some form of tubing or flexible hose.

    Tubes are joined by means of tube connectors, usually of the same material.

    Tubing. Some of the factors governing the selection of tubing are corrosion, temperature weight, mechanical strains, abuse and pressures.

    Because of its light weight, aluminum-alloy tubing and fittings are used wherever possible.

    Fittings are designed to withstand the bursting pressure that the tube of maximum wall thickness will withstand, assuming that the tube and fittings are of similar materials. For general heighpressure installations steel tubes and fittings are recommended.

    Flexible Hose. Flexible hose is used to connect hydraulic units between stationary and moving parts. Hoses are made up of varying layers of synthetic rubber, fabric, and wire braid.

    In installing flexible hose care must be taken that the hose is free from twists. Under pressure a twist will rotate the hose and loosen the connection, causing failure.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Для разных температурных режимов производители автошин разрабатывают разный химический состав резины для конкретного температурного диапазона. Зимние шины  при температуре выше +5 по Цельсию не рекомендуется использовать, они становятся мягче и буквально «плавятся», но кроме того еще и не выполняют в полной мере своих функций, устойчивость автомобиля на дороге при этом становится большим вопросом.

Летняя резина, при приближении температуры воздуха к «нулю» твердеет и становится абсолютно «дубовой», что существенно повышает вероятность заноса (даже на относительно сухом покрытии), а также вероятность разрыва колеса при обычном проколе. Всесезонные шины лучше всего чувствуют себя именно в околонулевой температуре, скажем, от -5 до +10 градусов.

IV.        Fill in the prepositions where it is necessary.

This writer is known all ... the world. Many people are fond ... his books. I read one of his novels ... a month ago. He tells his stories ... such a way that you remember them ... a long time. Although his characters arc imaginary it always seems that they live ... real life.

... the beginning of the year they made a trading expedition ... Africa. Crusoe left ... saying good-bye to anyone.  ...his way ... London he had his first experience ... a shipwreck.

V.        Заполните пропуски словами many, much или little, a little:

When we came to the dining-room there were ... people there already. We sat down at a table, took the menu-card and began to read it. "I shall not eat ... today", said, "... soup, some milk and ... cake-no thing else".

"I never eat very ... said Mary". But today I am hungry, and I want to eat as ... as I can: soup, meat, fish and potatoes". "But it will take a lot of time", said Peter, "and we have very ...time, you know. We have ... things to do before the lecture begins".

VI.        Use the Present Continuous instead of the infinitives given in brackets:

1. II (to rain)? Yes, it (to rain) very hard.
2. The delegation (to leave) Moscow tomorrow.
3. Somebody (to talk) the next room.
4. Who (to make) such a noise?
5. What you (to read) now? I (to read) stories by Maugham.
6. Somebody (to nock) at the door.
7. You (to go) anywhere tonight.

**Контрольная работа №7**

I.         Translate the text.

Machine Elements

Screw fastenings

Machine parts are held together by parts:

1. working in tension,
2. working in shear,
3. creating friction, and
4. using both shear and friction forces.

     Types of Fastenings-All fastenings can be divided into two classes- disconnectable fastenings and permanent joints.

    Disconnectable fastenings, in turn are effected by:

1. bolts and screws
2. b) wedges
3. c) dowel pins
4. d) keys

Permanent joints are obtained by means of:

a)  press fits

b) shrink fits

 c)  rivets

d)  welding, brazing, and soldering

e)  casting

     Forms if Threads.  Screw fastenings are used for holding two or more machine parts together or for adjusting one part with relation to another. In screw fastenings the threads are made in several forms but are always of triangular-type single thread.

    Screw threads are made right-hand and left- hand.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III.Translate the text.

Свеча зажигания — устройство для воспламенения топливно-воздушной смеси в самых разнообразных тепловых двигателях. Бывают искровые, дуговые, накаливания, каталитические. В бензиновых двигателях внутреннего сгорания используются искровые свечи.

IV.        Fill in the blanks with the preposition required. Translate the sentences into Russian.
... week-days we work. We rest ... Sundays. I get up ... the morning. We sleep ... night. She

promised to do this work ... time. We have our vacation ... January. We live ... the twentieth century. We tell the  ... a clock or a watch. Our child is in the fresh air ... morning ... night. My father comes home ... noon.

V.        Use the Present Simple or the Present Progressive:

1. Why you (walk) so fast today? You usually (walk) quite slowly.-1 (hurry). I am afraid to miss the train.
2. Cuckoos (not to build) nests. They (to use) the nests of other birds.
3. I always (to buy) lottery tickets, but I seldom (to win)
4. You cannot (to have) the book now because my brother (to read) it.
5. Some people (to do) everything with their left hand.
6. Who (to make) that terrible noise?-It is my son.
7. How you (to feel)?

VI.        Use an adjective or a proverb.

1. If you read this joke (proper) you will understand it.
2. It was a (gay) song and she sang it (gay).
3. She spoke very (good) and everybody wondered where she had learnt to speak so fluently
4. She was (kind ) to him and he was (happy).
5. The children were running among the trees laughing (happy).
6. (Usual) I get up (early) but that Sunday I got up (late).
7. The work must be done (careful).

**Контрольная работа№8**

I.  Translate the text.

**PINS.**

    Geometrically pins can be divided into cylindrical pins, called straight pins, and conical or taper pins. Dynamically pins can be classified as those used only to locate the relative position of two parts when there is little or no force acting upon the pin, and those that fasten two or more parts together and are subjected to considerable stresses, which are mostly in shear but sometimes in bending. Locating pins are called dowel pins or simply dowels. A connecting pin, like a dowel, may be used either as a permanent connection or as a fulcrum for a movable joint.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text

Комбинированный двигатель внутреннего сгорания (комбинированный ДВС) — двигатель внутреннего сгорания, представляющий собой комбинацию из поршневой (роторно-поршневой) и лопаточной машины (турбина, компрессор), в котором в осуществлении рабочего процесса участвуют обе машины.

IV. Supply *somebody, anybody, nobody, (no one, none), something, nothing, everybody, everywhere nowhere, somewhere, anywhere*where required.

1. Good morning...! 2. He never goes by train: he goes...by plane. 3. There is...here. 4. He did...all day yesterday. 5. They want chairs. They have ... to sit. 6. ... of the pupils will go to school. It is too cold. 7. ... is coming to see us. 8. She will tell us ... about her holidays.9. He will go ... to have a little rest. 10. Is  ... coming to inspect us? 11. Have you ... interesting to tell us? 12. Haven't you ... to go?

V. Replace the infinitives given in brackets by the Past Indefinite, or the Past Continuous

1. John (to write) the label when the bell (to ring) and a short man (to enter). A dog (to follow) him.
2. There (to be) silence while the man (to look) John up and down.
3. I (to see) the light in your windows as I (to pass).
4. During the dinner while he (to eat) his piece of cold meat, his aunt (to help) herself to wine.
5. While he (to read) a newspaper she (to sit) studying him, and by the look in her eyes he (to see) that she (to reflect) on something concerning him.
6. Jim half (to dream) still when he (to come) to the place of his destination.

VI.        Change the verbs in bracket by Gerunds. Put prepositions where necessary.

I have no intention ... (to stay) here any longer. 2. She insisted ... (to help) me. Are you fond of ... (to play). They have had very much experience ... (to cast). There was no possibility ... (to come) in time. There is little chance ... (to see) him today. We have the pleasure ... (to invite) them to the evening party. I think ... (to go) to the South in summer. We are proud  ... (to fulfill) that task ahead of time. They had not any difficulty ... (to get) new machines.

**Контрольная работа№9**

I.        Translate the text.

**KEYS**

    Types of keys.-The main function of a key is to transmit torque between a shaft and a machine part assembled on it. In most cases keys prevent relative motion, both rotary and axial. In some constructions keys allow an axial motion between the shaft and the hub, such keys are called feather or spline keys. In spite of the tendency to standardize there are many key types in use by various manufacturers.

     According to various characteristics keys can be distinguished as straight and tapered; rectangular, dovetailed, chamfered round, and disk- shaped: radial and tangential; and (according to their use) for light duty and for heavy duty.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Для разных температурных режимов производители автошин разрабатывают разный химический состав резины, таким образом «затачивая» конкретную шину под эксплуатацию в конкретном температурном диапазоне.

IV. Fill in the prepositions.

When the waitress came, he ordered some soup and meat. "Can you bring me some white bread?" asked John. "Yes, of course, I can", answered the waitress, "I shall bring you some ... a minute". She came back ... a few minutes. "What will you have ... dessert?" she asked. John asked her to bring him some ice cream. "I'm sorry", said the waitress. "It will only be ready ... half an hour". So they took some milk, paid ... their dinner, and went out ... the street. John then went ... the library, Peter went home.

V.        Fill in the blanks with the articles *a, an, the*where necessary.

I have ... hobby. I like to cook. During my leisure time I make ... cakes and pies. It is not difficult to make ... pie. Sometimes my brother helps me. He is ... good boy and we get along well with ... each other. My brother usually goes ... shopping and buys ... different things, which are necessary for ... cooking. My cakes are tasty but I like ... pies ... best of all.

VI.   Use the Future Perfect where possible:

1. After the clerk (to decode) the telegrams he (to take) them to the chief.
2. I am sure he (to throw) some light upon this matter before I (to learn) about it from my sister's letter.
3. The secretary (to look through) all the papers by the time the director (to come).
4. Do not start arguing until you (to hear) what I have to say.
5. 10.1 suppose that when my letter (to reach) you, you (to return) from your voyage.
6. If you do not hurry, the train (to leave).
7. We (not to be able) to start the experiment before we (to obtain) the necessary data.

**Контрольная работа №10**

1. Translate the text.

**Press, Shrink, and Friction Joints**

       Definitions.  A press joint, also called a force joint, is obtained by forcing a shaft into a hole that is slightly smaller than the shaft. This is possible because of the elasticity of the materials which produces the grip that holds the hub and shaft together.

      A shrink joint differs from a press joint chiefly by the method of assembling it. The hub is heated to expand its bore and to slip it on the shaft. When the hub cools down to the temperature of the shaft, the grip is produced in the same way as in the force joint. The shrink joint is also used to connect machine parts by means of special rings, anchors, and tie rods.

       In a friction joint the holding grip is produced by the conical shape of the shaft end and the hub bore and by the pull of a nut, or by a slotted hub whose bore is smaller than the shaft and which is spread by a wedge when the joint is being assembled.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Если Вы ездите в основном на газе, снимите электромагнитный клапан бензина и штатный бензонасос, установите вместо последнего заглушку. Купите и установите электромагнитный бензонасос печки от автомобиля ЗАЗ-968 вместо штатного. Это существенно улучшит эксплуатацию автомобиля

IV. Fill in the prepositions where it is necessary.

This writer is known all ... the world. Many people are fond ... his books. I read one of his novels ... a month ago. He tells his stories ... such a way that you remember them ... a long time. Although his characters are imaginary it always seems that they live ... real life.

... the beginning of the year they made a trading expedition ... Africa. Crusoe left ... saying good-bye to anyone. ...his way ... London he had his first experience ... a shipwreck.

V.        Replace the infinitives given in brackets by the Past Indefinite or the Past Continuous

1. John (to write) the label when the bell (to ring) and a short man (to enter). A dog (to follow) him.
2. There (to be) silence while the man (to look) John up and down.
3. I (to see) the light in your windows as I (to pass).
4. During the dinner while he (to eat) his piece of cold meat, his aunt (to help) herself to wine.
5. While he (to read) a newspaper she (to sit) studying him, and by the look in her eyes he (to see) that she (to reflect) on something concerning him.
6. Jim half (to dream) still when he (to come) to the place of his destination.

VI.        Change the verbs in bracket by Gerunds. Put prepositions where necessary.

I have no intention ... (to stay) here any longer.  She insisted ... (to help) me. Are you fond of  ... (to play).  They have had very much experience ... (to cast). There was no possibility ... (to come) in time. There is little chance ... (to see) him today. We have the pleasure ... (to invite) them to the evening party. I think ... (to go) to the South in summer.

**Контрольная работа № 11**

I. Translate the text.

**Riveted Joints.**

     General Remarks.- Riveting has been the standard method of joining plates and structural parts before welding began to replace it with increasing rapidity.

Rivets.-A rivet is a round bar consisting of an upset end called the head, and a long part called the shrank. The rivet blank is heated to a red glow, inserted into one of the holes , and, while the head is held firmly against the plate by a heavy sledge, the projecting end is formed into a second head, called the point, by means of a hand hammer and set or by a press.

Button heads are used for small rivets which are driven cold; pan heads are used chiefly in ship work; countersunk heads are used only in special cases, chiefly in structural work and below the water line in ships; the countersunk points weaken the plate so much that they should be used only when unavoidable; the others, including button heads, are used in boiler and structural work.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

 Транспортный контроль - система мониторинга и диспетчеризации транспорта.

Транспортный контроль позволяет гибко настраивать отчетность по каждому ТС, либо по группе ТС, вести подробный журнал событий, и при необходимости, выводить отчеты в существующую информационную систему клиента. Cистема контролирует абсолютно все: пройденное расстояние, отработанные моточасы, отклонения от планового маршрута, несанкционированные сбросы груза, выезды из заданной зоны. Повышает эффективность Вашей работы на 30%.

IV. Fill in the blanks with the articles *a, an, the*   and prepositions, where necessary.

There are... two rooms in it. We have also ... kitchen and ... bathroom, kitchen is...big enough. As ... rule, my mother cooks for us. We spend ... lot of ... time together in ... kitchen. There is...TV set in ... comer of ... kitchen, and we often watch ...TV there. When Mary was to open a meeting.. .the first time ... her life, her voice shook ... excitement. The young scientist shook hands ... his friends who had com ... the airport to see him ... .I wonder why Bob is such an ill-natured boy. It's a pity he takes ... his mother only ... appearance!  Ask Kate to join ... our party. She looks serious, but I know she is very gay ... nature and is fond of ... singing and dancing.

V.        Fill in blanks with the Past Progressive or the Past Simple Tense of the verbs in margin.

1. I ... a letter to my friend yesterday .                                                           write
2. We ... to a lecture yesterday at ten o'clock.                                                                 listen
3. She ... the piano from 11 till 12 o'clock.                                                                         play
4. When he ... in, I ... my exercises.                                                             come, do
5. What ... you yesterday at 8 o'clock?                                                            do
6. Yesterday when I ... the newspaper, my sister ... to a concert over the radio.           read, listen
7. She ... out of the window when I ... her.                         look, see

VI. Choose the correct word form those given in brackets:

1 .When I saw that actress on the stage for the first time, she (to look like, to take after) a small girl. From her biography I learnt that she (to look like, to take after) her mother, who had also been a great actress. 2. If you want some information on trade, go to the Ministry library. There are a lot of good (magazines, journals) on the subject there.

**Контрольная работа № 12**

I.  Translate the text:

**Bearings**

     A Beaming is a machine part which supports a moving part and confines its motion. That part of a shaft which rotates in a bearing is called a journal. Bearings in which one rubbing surface slides over another are called plain bearings and may be divided into two classes: Those with a continuous rotary motion and those with an intermittent motion. To the first class belong journal bearings, which carry a load acting at right angels to the shaft axis, and thrust bearings, which take a load acting in the direction of the shaft axis. To the second class belong bearings of parts having a rocking motion, as crossheads.

     Bearings with a continuous rotary motion form the great majority of all bearings. Bearing failures.-The failure or need of replacement of a bearing with sliding contact may be due to:

1. excessive wear of the bearing surfaces;
2. overheating; or
3. cracking of the bearing metal.

      Excessive Wear.-Wear is caused by metal-to-metal contact. It cannot be entirely eliminated but can be reduced by providing a sufficient bearing area and by adequate lubrication

Overheating, if not stopped in time, may cause either seizure of the journal if it runs in a hard-metal bearing or melting of the bearing surface if the bearing is lined with a metal having a low-melting temperature. Overheating is primarily caused by metal- to-metal contact. Lubrication decreases the danger of overheating.

     Cracking of the bearing metal is due to heavy shock loads, such as are taking place in the running gear of internal combustion engines when the compressive stresses in the bearing metal exceed its endurance limit.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Основные параметры подшипников:

Максимальные динамическая и статическая нагрузка (радиальная и осевая).

Максимальная скорость (оборотов в минуту для радиальных подшипников).

Посадочные размеры.

Класс точности подшипников.

Требования к смазке.

Ресурс подшипника до появления признаков усталости, в оборотах.

Шумы подшипника

IV. Put following sentences in plural.

1. This man is an engineer. 2. That woman is my sister. 3. This child is my son. 4. That goose is big. 5. This mouse is white. 6. This man is a doctor. 7. That woman is my cousin. She is a teacher. 8. That girl is my niece. She is a pupil. 9. This girl has a blue sweater. 10. This boy has a warm coat. 11. My uncle has a large flat. 12. There is a table in the room. 13.1 have a good pen. My pen is in my pocket. 14. There is a flower in the vase. 15. This child's foot is sore. 16. This cup is dirty. 17. That book is

V. Use the Past Indefinite or the Past Perfect.

1. They (to complete) all the preparation for the fancy-dress ball by 5 o'clock.
2. On leaving the hospital the man (to thank) the doctor who (to cure) him of his disease.
3. In the morning all the passengers (to feel) good after the night they.(to spend) in the comfortable sleeper.
4. During my last visit to the picture gallery I (to find) that I no longer (to like) the pictures which (to impress) me when I first (to see) them. Evidently my taste (to change).
5. Last night he (complete) the experiment which he (to begin) some months before.
6. They (to be) friends for some ten years before I (to meet) them.

VI. Fill in the blanks with prepositions and adverbial particles where necessary:

1. Instead ... buying something ... everyday wear, as she had first intended, Mary bought a ... sleeveless dress ... better wear. 2. I don't advise you to buy this pair ... shoes. I am afraid they'll soon wear.... 3.I wonder why the water has set the table ... two persons instead ... three. 4. Speaking at the production meeting, the director ... the factory pointed ... that each ... the workers and engineers was responsible ... carrying ... the plan.

**Контрольная работа № 13**

I.  Translate the text:

    The small car gets (go) from 12 batteries under the hood. Rather than conventional lead-acid batteries the car uses batteries made of nickel and iron.

    Due to their chemical composition they deliver double the electrical output of ordinary car batteries and have a life span twice as long.

    You can judge for yourself, the car achieves a top speed of 62 miles per hour and cruises for 124 miles before needing a recharge.

    It takes from 8 to 10 hours to recharge using a built-in recharger that can plug into any standard outlet.

    It's a 17,5 kilowatt motor driving the front wheels. Like all electric vehicles the car runs almost silently and is virtually nonpolluting.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Инжекторный двигатель существенно улучшает эксплуатационные и мощностные показатели автомобиля (динамика разгона, экологические характеристики, расход топлива). Инжекторные двигатели, безусловно, гораздо совершеннее карбюраторных. Отечественные инжекторные двигатели хорошо адаптированы к нашему холодному климату, поэтому неплохо заводятся при очень низкой температуре.

IV.  Fill in the blanks with the articles *a, an, the*  and prepositions, where necessary.

When Mary was to open a meeting ... the first time ... her life, her voice shook ... excitement. The young scientist shook hands ... his friends who had com ... the airport to see him ... .I wonder why Bob is such an ill-natured boy. It's a pity he takes ... his mother only ... appearance!  Ask Kate to join ... our party. She looks serious, but I know she is very gay ... nature and is fond of ... singing and dancing.

V.  Put the verbs in brackets into the correct voice and tense-forms:

1. Don't let the boy stay out so long. He (to run about) for three hours, and may catch cold. 2. That young singer has had very good training. He (to sing) for half an hour and never (to stop) for a moment's rest. 3. It is unfair of you to be so cross with the man. He (to be) away for two weeks and you can't blame him for few mistakes that (to make) during his absence. 4. Our reply (to send) to you as soon as all the dates (to fix) finally. At the moment some of them (to consider) still. 5. I (not to see) Ann lately. What she (to do)?  She just (to take) her final examinations and (to get ready) to go for a holiday.

VI. Use the Future Perfect where possible:

1. The librarian (to register) all the books by the end of the week.
2. I am afraid we (not to solve) all the problems by the time they (to come).
3. I hope that they (to receive) my letter by Saturday and/not to expect) me on Sunday.
4. Let me know as soon as you can (to make) an appointment with him.
5. After the clerk (to decode) the telegrams he (to take) them to the chief.
6. I am sure he (to throw) some light upon this matter before I (to learn) about it from my sister's letter.

**Контрольная работа № 14**

I.        Translate the text:

       The lathe is one of the most useful and versatile machines in industry, and is capable of carrying out many machining oper ations. The main components of the lathe are the headstock and tailstock at opposite ends of a bed, and a toolholder between them which holds the cutting tool. The toolholder stands on a cross slide which enables it to move across the saddle or carriage as well as along it, depending on the kind of job it is doing. The ordinary centre lathe can accommodate only one tool at a time on the tool-holder, but a turret lathe is capable of holding five or more tools on the revolving turret. The lathe bed must be very solid to avoid vibrations

      The headstock incorporates the driving gear and a spindle which holds the workpiece and causes it to rotate. The cutting speed of the tool is an important factor. Tapered centres in the hollow nose of the spindle and of the tailstock hold the work firmly between them. A feed shaft from the headstock drives the toolholder along the saddle, either forwards or backwards, at a fixed and uniform speed! This enables the operator to make accurate cuts and to give the work a good finish. Gears between the spindle and the feed shaft control the speed of rotation of the shaft, and the forward or back ward movement of the toolholder. The gear which the operator will select depends on the type of metal which he is cutting and the amount of metal he has to cut off. For a deep or roughing cut the forward movement of the tool should be less than for a finishing cut.

       Centres are not suitable for every job on the lathe. The operator can replace them by various types of chucks, which hold the work between jaws, depending on the shape of the work and the particu lar cutting operation. He will use a chuck, for example, to hold a short piece of work, or work for drilling, boring or screw-cutting. A transverse movement of the tool post across the saddle enables the tool to cut across the face of the workpiece and give it a flat surface. For screw-cutting, the operator engages the lead screw, a long screwed shaft which runs along in front of the bed and which rotates with the spindle. The lead screw drives the toolholder for wards along the carriage at the correct speed, and this ensures that the threads on the screw are of exactly the right pitch. The operator can select different gear speeds, or reverse the movement of the carriage and so bring the tool back to its original position.

     Lathes are now made with numerical control (for short NC) and with computer control. They work automatically according to pro teins. The unit is called a machining centre.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Find in the text English equivalents:

-шпиндельная бабка, передняя бабка

-задняя бабка

-резцедержатель

-салазки

-способен выполнять

IV         Use the right form of the adjective:

1. I suppose you know him well-probably (good) than anybody else. 2. He spoke English badly- (bad) than expected. 3. I can't understand what you're saying. Could you speak a bit (slow)? 4. A snail is (slow) than a tortoise. 5. I'd like to change cars (often). 6. My mother was feeling tired last night so she went to bed (early) than usual.

V.Use  *something,  anything, nothing* or *everything.*

1. ... is all right, the patient is much better today!
2. Is there ... interesting in the program of the concert?
3. I could see ... : it was quite dark.
4. Give me ... to drink.
5. I didn't take any money with me so I couldn't buy ... .
6. My new eyeglasses are very good, I can see ... now.

VI. Use the Present Simple or the Present Progressive:

1. Cuckoos (not to build) nests. They (to use) the nests of other birds.
2. I always (to buy) lottery tickets, but I seldom (to win)
3. You cannot (to have) the book now because my brother (to read) it.
4. Some people (to do) everything with their left hand.
5. Who (to make) that terrible noise?-It is my son.
6. How you (to feel)?
7. Switch on the light. It (to get) dark.

**Контрольная работа №15**

I.   Translate the text.

**The two-cycle principle**

      The suction and exhaust strokes can be eliminated if, at the end of the power stroke, the two valves are opened simultaneously and the fresh charge is forcibly blown in through the inlet valve driving out the waste gases through the exhaust valve. Then the two valves are closed again and the charge is ready for compression.

      A simpler way of doing the same thing is to provide openings in the cylinder wall at the lower end in such a way that they are uncovered by the piston as it nears the end of the power stroke. Valves are then no longer necessary.

      Since the cycle can now be completed in two strokes, it is called two-stroke or two-cycle. A two-cycle has a working stroke at every crankshaft revolution, and, therefore, gives nearly twice the power of a four-cycle engine, which has a working stroke only at every other crankshaft revolution.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

1. Тревожная кнопка (на случай разбойного нападения и т.д.)

2. Блокировка двигателя (возможность блокировать двигатель через диспетчера ООО Навигатор)\*

3. Звуковая сигнализация\*

4. Включение автономного питания при отключении аккумулятора (работа до 8 часов)

5. Круглосуточный диспетчерский центр

6. Соглашение о сотрудничестве с ОВД, создания условий сотрудничества по вопросам предупреждения и раскрытия противоправных деяний, связанных с незаконными посягательствами на автотранспортные средства.

IV. a) Fill in:

a)by            b)on           c)in          d)out of          e)off
How did you get to London? - … plane.

We can't get any more people …, you’ll have to wait for the next bus.

It's quicker to go … foot than to go … car there.

Excuse me, I have to get … at the next station.

       b) Supply the articles if they are necessary.

a)a            b)an         c)the          d)-

        apples on        other side of        wall are        sweetest.

Better        small fish than        empty dish.

Better        last smile then        first laughter.

Between        two stools one falls to        ground.

        brevity is        soul of wit.

V. Put the verbs in brackets into the correct voice and tense-forms:

l. Jack lives not far from us, but we (not/see) him often. 2. What's the matter? You (look) very happy. 3. Mrs. Laura (be) in her office. 4. The match (finish) at half past nine, so I will be at home by ten o'clock. 5. He knows Africa well because he (travel) a lot there. 6. ... they (tell) anything about their summer plans?

VI. For questions 1-14 read the text below. Use the word given in capitals at the end of the line to form a word that fits in the space in the same line. The first answer has been given as an example.

Jazz improvisation

 I believe the most difficult (1 adjustments) humans make are those which require (2) and change. We are a species of habit, one which prefers a daily return to the sanctity of its own preserved environment and one which would rather sidestep perceived conflict. As we age this becomes more apparent. We are (3) when asked to taste, hear, touch, and view the (4) . Exploring the unknown requires a certain amount of faith and a (5) to improvise. One must abandon preconceived notions governing eventual outcome.

 (6) for eternity have been improvising. Whether it's an object chosen to transmit sound or a (7) of tones arranged to communicate a thought, they have been at the fore front of (8). Bach, Beethoven and Chopin were great (9).

 1. adjust 2. flexible 3. apprehension 4. familiar 5. willing 6. music 7. combine 8. innovate 9. Improvisation.

**Контрольная работа №16**

I.    Translate the text.

**Air and fuel can be mixed outside the cylinder**

       If the fuel is gas, it is as simple to mix it with the air, as in an ordinary gas burner. The gas is piped to the air intake tube of the engine, and a valve is provided by means of which the proportions of air and gas can be regulated.

       If the fuel is a liquid which can easily evaporate at ordinary temperatures (a volatile liquid like alcohol, gasoline, or kerosene), it may be mixed with the air in a carburetor. This consists essentially of a wide tube through which air is sucked into the engine inlet. In the center of this tube there is a small nozzle to which the liquid fuel is supplied. The flowing air produces a suction on the nozzle, and causes a fine jet of fuel to issue from it. This jet is picked up by the air and torn to minute droplets, which evaporate and mix with the air. In the world today carburetor engines far outnumber any other type of engines, and most of them use gasoline for fuel. Their widest application is in the automotive field.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Характер работы двигателя на газе по сравнению с двигателем, работающим на бензине остается тот же, если не считать небольшую потерю мощности и некоторое ухудшение динамики автомобиля при разгоне и на подъеме.

IV.        a) Fill in:

a) by       b)on       c)in      d)out of       e)off

When the train arrives you'll get\_\_\_it. At Bristol you'll get        . Don't wait  outside. When a taxi stops for you I'll tell you and you'll get        it.  Since I broke my leg I have to travel        bus because I can't get\_\_\_\_the car.  When your bus arrives you get\_\_\_\_it. If you want to leave it, you get\_\_\_taxi. I usually go back home        bus. It's mush cheaper then going        taxi. Two men with guns got\_\_\_the car and went into the shop.

b) Supply the articles if they are necessary.
a)a        b) an        c) the           d)-.

One law for         rich and another for

There is no        place like        home.

A danger foreseen is         half avoided.

Closed mouth catches n(        flies.

V.  Put the verbs in brackets into the correct voice and tense-forms:

1. What time the next bus (leave) for Bristol? 2. Yesterday as I was walking down Cherry Lane, I (meet) Thomas, an old friend of mine. 3. We (just/ talk) about him when he suddenly (come) in. 4. We were late. The meeting (start) an hour before. 5. He was tired because he (work) hard in the garden all day. 6. I (talk) over the phone when they brought me the letter.

VI.        Use the right form of the adjective:

1. If you want to find your way around the city (easy), you should buy the map of it. 2. I'm getting (fat). 3. We are going (slow). 4. The (soon) you start, (quick) you'll finish. 5. This camera costs (twice more than / twice as much as) the other one. 6. Sam's (half less... than) CDs now half as many... as. I had last year.

**Контрольная работа №17**

I. Translate the text.

    Automobile engines have several cylinders All automobile engines have a number of cylinders (usually four, six, or eight; sometimes twelve and sixteen), for the purpose of obtaining a more uniform driving force and more power.

    As the steam expands in the cylinder, the force which pushes the piston diminishes, and therefore the crank is moved around by a force which is not constant. In a four-cycle engine this effect is even more pronounced, because there are two strokes (suction and exhaust) during which the piston does practically no work; there is one stroke (compression) during which the piston is actually opposed; and there is the power stroke during which the driving force must be extremely large.

      If, in an engine, several cylinders are arranged so that tire power strikes of the pistons occur at different moments, the crankshaft will be turned by a much more uniform driving force and the flywheel can be much lighter than for a single cylinder. Again, an engine with several pistons will have a better balance; the weight of one piston bobbing up and down will be compensated by the weight of another piston bobbing down and up.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Инжекторный двигатель существенно улучшает эксплуатационные и мощностные показатели автомобиля (динамика разгона, экологические характеристики, расход топлива). Инжекторные двигатели, безусловно, гораздо совершеннее карбюраторных. Отечественные инжекторные двигатели хорошо адаптированы к нашему холодному климату, поэтому неплохо заводятся при очень низкой температуре.

IV. Fill in:

a) by       b)on       c)in      d)out  of      e)off

Don't wait outside. When a taxi stops for you I'll tell you and you'll get        it.

I decided not to go\_\_\_car. I went\_\_\_my bike instead.

It takes about half an hour to get home\_\_\_my bike and about twenty minutes

\_\_\_the bus.

b) Supply the articles if they are necessary.

a)a        b)an        c)the        d)-

One drop of\_\_\_poison infects\_\_\_whole ton of wine.

One hand washed\_\_\_other.

One law for\_\_\_ rich and another for\_\_\_poor.

There is no        place like        home.

V. Put the verbs in brackets into the correct voice and tense-forms:

l. Jack lives not far from us, but we (not/see) him often. 2. What's the matter? You (look) very happy. 3. Mrs. Laura (be) in her office. 4. The match (finish) at half past nine, so I will be at home by ten o'clock. 5. He knows Africa well because he (travel) a lot there. 6. ... they (tell) anything about their summer plans? 7. Has the secretary come yet? I want to have my papers (type).

VI.    Use the right form of the adjective:

1. If you want to find your way around the city (easy), you should buy the map of it. 2. I'm getting (fat). 3. We are going (slow). 4. The (soon) you start, (quick) you'll finish. 5. This camera costs (twice more than / twice as much as) the other one. 6. Sam's (half less... than) CDs now half as many... as. I had last year.

**Контрольная работа №18**

I.  Translate the text.

**Injection engines**

      There are many liquid fuels which are hard to evaporate. Such a fuel can be utilized in internal combustion engines by spraying or injecting it directly into the combustion chamber at the time combustion is to begin-after the air is compressed. In doing so, the liquid must be well broken up into small droplets (atomized), and it must be made to penetrate evenly throughout the entire combustion chamber filled with compressed air, in order to secure the most intimate and uniform mixture which is so necessary for good combustion.

       Injection engines can be of both the four- and the two-cycle types. It is obvious that during scavenging in two-cycle engines a portion of the fresh charge may be lost through the exhaust with the waste gases. In mixture engines of the two-cycle type some fuel is thereby lost, where as in injection engines of the two cycle type only air may thus be lost, since the fuel is not introduced until after compression. From this it follows that mixture engines are best suited for four-cycle operation while injection engines can be of both types, and that injection engines are the only ones which will fully bring out the advantages of the two-cycle principle.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Инжекторный двигатель существенно улучшает эксплуатационные и мощностные показатели автомобиля (динамика разгона, экологические характеристики, расход топлива). Инжекторные двигатели, безусловно, гораздо совершеннее карбюраторных. Отечественные инжекторные двигатели хорошо адаптированы к нашему холодному климату, поэтому неплохо заводятся при очень низкой температуре.

IV.  a) Fill in:

a)by       b)on       c)in       d)out of       e)off

Since I broke my leg I have to travel        bus because I can't get        the car.

When your bus arrives you get        it. If you want to leave it, you get        taxi.

I usually go back home        bus. It's mush cheaper then going        taxi.

Two men with guns got        the car and went into the shop.

     b) Supply the  articles  if t hey  are  necessary.
a)a        b)an        c)the        d)-

        apples on        other side of        wall are        sweetest.

Better        small fish than        empty dish.

Better        last smile then        first laughter.

V.  Put the verbs in brackets into the correct voice and tense-forms:

1. We (walk) along a forest road for two hours when we saw a house.
2. And I began writing to you instead of going to the seaside, as I (plan) before.
3. Did you say anything when he asked you? -No, I didn't. You see, if I (say) even a word, he     (fly) into a rage.
4. If the water (be heated) to 100 C, it (boil).

VI.   Use the right form of the adjective:

1. I suppose you know him well-probably (good) than anybody else. 2. He spoke English badly- (bad) than expected. 3. I can't understand what you're saying. Could you speak a bit (slow)? 4. A snail is (slow) than a tortoise. 5. I'd like to change cars (often). 6. My mother was feeling tired last night so she went to bed (early) than usual.

**Контрольная работа №19**

1. Translate the text.

**Ignition**

        After the charge is in the cylinder and after it is compressed in the combustion chamber, it must be ignited. Nearly all modern mixture engines employ electric ignition. It consists in making a hot electric spark at the proper time in the combustion chamber. Such a spark is produced between the two electrodes of a spark plug, energized either from a battery or from an electric generator, and timed by a distributor.

       When air is compressed, it heats up, and its temperature depends on the compression pressure. If this is high enough, the air gets so hot that oil sprayed into it ignites spontaneously. Engines that operate on this principle of compression ignition are coming more and more into use. They are by the name of their inventor, Rudolph Diesel, who patented this idea in 1892.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Свеча зажигания — устройство для воспламенения топливо-воздушной смеси в самых разнообразных тепловых двигателях. Бывают искровые, дуговые, накаливания, каталитические. В бензиновых двигателях внутреннего сгорания используются искровые свечи.

IV. Fill in:

a) by       b)on       c)in       d)out of      e)off

Since I broke my leg I have to travel        bus because I can't get\_\_        the car.

When your bus arrives you get\_\_        it. If you want to leave it, you get\_\_        taxi.

I usually go back home\_\_         bus. It's mush cheaper then going        taxi.

Two men with guns got        the car and went into the shop.

b) Supply the articles if they are necessary.

a)a        b)an        c)the        d)-

        bravity is        soul of wit.

        charity begins at        home.

A danger foreseen is\_\_\_half avoided.

Closed mouth catches no\_\_flies.

V.        Put the verbs in brackets into the correct voice and tense-forms:

1. We (just/ talk) about him when he suddenly (come) in. 2. We were late. The' meeting (start) an hour before. 3. He was tired because he (work) hard in the garden all day. 4. I (talk) over the phone when they brought me the letter. 5. If I (get up) early tomorrow morning, I (go) jogging. 8. If Benjamin Franklin (not/work) so hard, he (not/become) the symbol of America.

VI.        Use the right form of the adjective:

1. If you want to find your way around the city (easy), you should buy the map of it. 2. I'm getting (fat). 3. We are going (slow). 4. The (soon) you start, (quick) you'll finish. 5. This camera costs (twice more than / twice as much as) the other one.

**Контрольная работа 20**

1. Translate the text:

**WELDING**

      There are a number of methods of joining metal articles together depending on the type of metal and the strength of the joint which is required. Soldering gives a satisfactory joint for light articles of steel, copper or brass, but a joint is brazed, riveted or welded for strong permanent joints.

     The simplest method of welding two pieces of metal together is heating. The ends are heated to a white heat (for iron, about 1300°C) in a Flame, when the metal becomes plastic. The ends are then pressed or hammered together. Care must be taken to ensure that .the welded surfaces are clean, for dirt will weaken the weld. A high temperature causes oxidation, and a film of oxide is formed on the heated surfaces. For this reason, a flux is applied to the heated metal.  At welding heat, the flux melts, and the oxide particles are dissolved in it together with any other impurities which may be present. The metal surfaces are pressed together, and the flux is squeezed out of the weld. A number of different types of weld may be   used, a vee-shaped butt weld normally employed. It is rather stronger than the ordinary lap weld.

     The heat for welding is generated in several ways, depending on the sort of metal which is being welded and on its shape. An ex tremely hot flame can be produced from an oxy-acetylene torch. For some welds an electric arc is used. In this method, an electric cur rent is passed across two electrodes, and the metal surfaces are placed between them. The work itself constitutes one electrode and the other is an insulated filler rod. An arc is struck between the two, and the heat which is generated melts the metal at the weld. A dif ferent method known as spot welding is usually employed for welding sheets or plates of metal together. Two sheets or plates are placed together with a slight overlap, and a current is passed between the electrodes. Today the new welding methods include laser welding and electronic beam welding.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Find in the text English equivalents:

-прочный шов, соединение

-сварочный шов, сварочное соеди нение

-выдавливать флюс

- высокая температура сварки вызывает окисление

 -растворяться

-ацетиленовая грелка

-присадочный пруток

-между электродами проходит ток

IV.  Fill in the blanks with the articles *a, an, the*   and prepositions, where necessary.

When Mary was to open a meeting.. .the first time ... her life, her voice shook ... excitement. The young scientist shook hands ... his friends who had com ... the airport to see him ... .I wonder why Bob is such an ill-natured boy. It's a pity he takes ... his mother only ... appearance!  Ask Kate to join ... our party. She looks serious, but I know she is very gay ... nature and is fond of ... singing and dancing.

V. Use *little* or  *few.*

 1. I have ... time, so I can't go with you. 2. He has ... English books. 3. There is ... ink in my pen. Have you got any ink? 4. There are ... bears in the zoo.  5. Tom Canty was the son of poor parents and had very ... clothes. 6. There is tool ... soup in my plate. Give me some more, please. 7.  The children returned from the wood very sad because they had found very  ...  mushrooms. 8. There was too ... light in the room, and I could not read. There are very ... people who don't know that the earth is round.

VI.        Use the Past Indefinite or the Past Perfect.

1. They (to complete) all the preparation for the fancy-dress ball by 5 o'clock.
2. On leaving the hospital the man (to thank) the doctor who (to cure) him of his disease.
3. In the morning all the passengers (to feel) good after the night they (to spend) in the comfortable sleeper.
4. During my last visit to the picture gallery I (to find) that I no longer (to like) the pictures which (to impress) me when I first (to see) them. Evidently my taste (to change).
5. Last night he (complete) the experiment which he (to begin) some months before.
6. They (to be) friends for some ten years before I (to meet) them.

**Notes and commentary**

As to the manner-что касается образа (способа)

Loads are applied to-нагрузки прилагаются к

Static load -статическая нагрузка

Repeated loads -переменная (периодически повторяющаяся) нагрузка.

Energy Load-динамическая (ударная) нагрузка

То remain constant-оставаться постоянным

A very large number of times-большое количество раз

A connecting rod-шатун

When the engine is running-когда двигатель работает

A relatively short period of time-относительно небольшой отрезок времени

To come in contact with-соприкасаться

For this reason-no этой причине

Is expressed in foot-pounds-выражается в фунтах

Uniformly distributed or non-uniformly distributed-равномерно распределённый или неравномерно распределённый

 In comparison with-по сравнению

Within a cylinder-внутри цилиндра

 Inner dead-centre-нижняя мёртвая точка

The ""poppet type-тарельчатый тип

Outward stroke-ход всасывания, ход впуска

Shortly before-незадолго до того как

Outer dead-centre-верхняя мёртвая точка

Is compressed into the free space-сжимается в свободном пространстве

On the other hand-c другой стороны

Is slowed down-замедляется

During each complete revolution of the crankshaft-во время каждого оборота коленчатого вала

Lb. per. Sq. in.-фунт на квадратный дюйм

Charge of gas-порция газа

On the piston top-на головке поршня

Thus preventing undue loss through mixing with the exhaust gas- исключая таким образом чрезмерные потери из-за смешивания с выхлопным газом (отработанным)

Non-return valve-обратный клапан

To-and-fro motion-возвратно-поступательное движение

То function as to act as -функционировать, действовать в качестве

Pressure gauge-манометр

Remote transmission-дистанционная передача (действующая на расстоянии)

 Manual or pedal effort-ручного или ножного усилия

Tubing-трубы

Flexible hose-гибкий шланг

Joined by means of-соединены посредством

The factors governing the selection-факторы, определяющие выборы

Because of-из-за

Whenever possible- где только возможно

The bursting pressure-разрывающие давление

Assuming that-принимая во внимание

Stationary and moving parts-неподвижные и подвижные

Are made up of-сделаны из

In installing flexible hose ca-re must be taken that the hose is free from twist- при установке гибкого шланга следует принять меры против скручивания шланга.

Are held together by parts-удерживаются детали

Parts working in tension-деталями, работающими на растяжение

Parts working in shear-деталями, работающим на сдвиг (срез)

Parts creating friction-деталями, создающими трение

Parts using both...and-деталями, испытывающими как...так и

Disconnectible fastenings-разъёмные соединения

Permanent joint-неподвижное соединение

In turn-в свою очередь

Are effected bу - осуществляются

Dowel pins-установочный штифт

Are obtained by means of-осуществляются посредством

Press fits-прессовая посадка

Shrink fits-горячая посадка

With relation to another-относительно другой детали

Triangular-type single thread-треугольная однозаходная резьба

Right-hand thread-правая резьба

Left-hand thread-левая резьба

Are subjected to-подвергаются

Which are mostly in shear but sometimes in bending-которые чаще бывают срезывающими, а иногда изгибающими

Either ... оr – или ... или

Is to (+inf.)- состоит в том, чтобы

In most cases- в большинстве случаев

Feather or spline key-направляющая или призматическая шпонка

In spite of-несмотря на

 In use-применяемых

According to-согласно

Dovetailed key-шпонка в виде ласточкина хвоста

Chamfered round key-цилиндрическая шпонка или шпонка со

скошенным ребром

Disk-shaped key- дискообразная шпонка

Radial and tangential key-радиальная или тангенциальная шпонка

For light and for heavy duty- для малых и больших нагрузок

A press joint-прессовая посадка        |

Is obtained by forcing a shaft into hole-получается при впрессовывании вала в отверстие

Which produces the grip that holds the hub and shaft together-который зажимает и удерживает втулку и вал вместе.

A shrink joint-горячая посадка

The hub is heated to expand its bore and to slip it on the shaft-втулка нагревается, чтобы расширить её внутренний диаметр и посадить её на вал

By means of-посредством

Tie rod-соединительная тяга

The conical shape of the shaft end and the shaft bore-конической

формы конца вала и отверстия втулки

The pull of а nut-затяжка гайки

As in the case-как и в случае

On the other hand-c другой стороны

More than three times-более чем в три раза

Is due to-обусловлена

When they are subjected to-когда они подвергаются

Is heated to a red glow-нагревается до красна

Is held firmly against the plate-прижимается плотно к пластинке

Is formed into a second head-формируется во вторую головку

A set-обжимка

Which are driven cold-которые клепаются в холодном состоянии

So much that-до такой степени что

They should be used only when unavoidable- применяются только, когда это неизбежно

At right angels to the shaft axis- под прямыми углами к оси вала

In the direction of the shaft axis-no направлению коси вала

A rocking motion-качающееся движение

Wrist pin-поршневой палец

Rotary motion-качающееся движение

In time-во время

Hard metal bearing-подшипник из твёрдого металла

 Is lined with a metal-покрыт внутри металлом

Such as are taking place-или такими которые имеют место

Endurance limit-предел выносливости

**Таблица неправильных глаголов**

|  |  |  |  |
| --- | --- | --- | --- |
| Infinitive (1 форма) | Past indefinite (II форма) | Participle 11 (III форма) | Перевод |
| to be | was, were | been | быть |
| to become | became | become | становиться |
| to begin | began | begun | начинать |
| to bend | bent | bent | сгибать(ся) |
| to break | broke | broken | ломать |
| to bring | brought | brought | приносить |
| to build | built | built | строить |
| to buy | bought | bought | покупать |
| to cast | cast | cast | бросать |
| to catch | caught | caught | ловить, поймать |
| to choose | chose | chosen | выбирать |
| to come | came | come | приходить |
| to cost | cost | cost | стоить |
| to do | did | done | делать |
| to draw | drew | drawn | тянуть; рисовать, |
| to drink | drank | drunk | пить |
| to drive | drove | driven | водить *(машину)* |
| to eat | ate | eaten | есть |
| to feel | felt | felt | чувствовать |
| to fight | fought | fought | драться, бороться |
| to find | found | found | находить |
| to fly | flew | flown | летать |
| to forbid | forbade | forbidden | запрещать |
| to forget | forgot | forgotten | забывать |
| to forgive | forgave | forgiven | прощать |
| to get | got | got | получать, становиться |
| to give | I gave | given | давать |
| to go | went | gone | идти |
| to grow | grew | grown | расти, становиться |
| to have | had | had | иметь |
| to hear | heard | heard | слышать |
| to hide | : hid | hidden | прятать (ся) |
| to hold | : held | held | держать:   проводить |
| to hurt | hurt | hurt | Ушибить (ся), нанести вред |
| to keep | kept | kept | держать; хранить: |
| to know | knew | known | знать |
| to learn | learnt | learnt | учить |
| to leave | left | left | покидать, оставлять |
| to let | let | let | позволять |
| to lose | lost | lost | терять |
| to make | made | made | делать |
| to mean | meant | meant | виду |
| to meet | met | met | встречать |
| to pay | paid | paid | платить |
| to put | put | put | класть |
| to read [ri:d] | read [red] | Read [red] | читать |
| to rewind | rewound | rewound | перематывать |
| to ride | rode | ridden | ехать верхом |
| to ring | rang | rung | звонить, звенеть |
| to run | ran | run | бегать |
| to say | said | said | говорить |
| to see | saw | seen | видеть |
| to send | sent | sent | посылать |
| to sew | sewed | sewn | шить |
| to shake | shook | shaken | трясти |
| to sing | sang | sung | петь |
| to sit | sat | sat | сидеть |
| to speak | spoke | spoken | говорить |
| to speed | sped | sped | спешить, быстро ехать |
| to spell | spelt | spelt | сказать слово по буквам |
| to spend | spent | spent | тратить, проводить |
| to stand | stood | stood | стоять |
| to swim | swam | swum | плавать |
| to take | took | taken | брать |
| to teach | taught | taught | учить |
| to tell | told | told | рассказывать |
| to think | thought | thought | думать |
| to understand | understood | understood | понимать |
| to wear | wore | worn | носить |
| to win | won | won | выигрывать побеждать |
| to write | wrote | written | писать |

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