Министерство образования Республики Беларусь
Филиал Учреждения образования «Брестский государственный технический университет» Политехнический колледж

УТВЕРЖДАЮ
Зам. директора по учебной работе
_____ С.В.Маркина
"__ " _____ 20 __ г.

ИНОСТРАННЫЙ (английский) ЯЗЫК ПРОФЕССИОНАЛЬНАЯ ЛЕКСИКА

Методические указания
для выполнения домашних контрольных работ для учащихся заочного отделения
специальности «Проектирование радиоэлектронных средств».

Брест 2017

Разработала Т.А.Носова, преподаватель Филиала БрГТУ Политехнический колледж

Методические указания разработаны на основании типовой учебной программы по учебной дисциплине «Иностранный язык (проф.лексика)», утвержденной Министерством образования Республики Беларусь 23.06.2015 года

Методические указания обсуждены и рекомендованы к использованию на заседании цикловой комиссии социально-гуманитарных дисциплин
Протокол №_____от_____
Председатель цикловой комиссии социально-гуманитарных дисциплин
_____ В.В. Барбачева

ВВЕДЕНИЕ

Расширение международных связей делает иностранный язык востребованным в практической и интеллектуальной деятельности специалиста. Цель профессионально направленного обучения иностранному языку определяется социальным заказом общества и государства по отношению к языковому образованию рабочих кадров с учетом образовательной концепции учебной дисциплины «Иностранный язык».

Типовая учебная программа по учебной дисциплине «Иностранный язык (профессиональная лексика)» (далее – программа) предусматривает изучение профессионально направленного курса с учетом профиля профессиональной подготовки специалиста и конкретной квалификации.

Программа составлена с учетом связи ее учебного материала с программным учебным материалом специальных учебных дисциплин профессионального компонента. Профессионально направленный подход осуществляется практическим показом роли иноязычных знаний и умений в будущей профессиональной деятельности учащихся.

Основной целью изучения учебной дисциплины «Иностранный язык (профессиональная лексика)» является формирование профессиональной иноязычной коммуникативной компетенции в соответствии с профилем подготовки, которая может быть представлена совокупностью:

знаний лексического и грамматического минимума, необходимого для решения профессиональных задач средствами иностранного языка;

коммуникативных умений в четырех видах речевой деятельности (восприятие и понимание речи на слух, говорение, чтение, письмо) в сфере профессионального общения;

понимания ценности иностранного языка как средства познания и общения в профессиональной деятельности;

готовности к самообладанию в области иностранного языка в соответствии с требованиями профессиональной деятельности специалиста.

Достижение цели в единстве ее образовательного, развивающего и воспитательного аспектов предполагает решение комплекса задач:

формирование навыков чтения иностранных текстов профессиональной направленности, понимания высказывания в соответствии с ситуацией профессионального общения с учетом национально-культурных особенностей речевого поведения носителей языка; углубление и совершенствование базовых языковых знаний, расширение их профессионально ориентированной составляющей;

развитие умений использовать различные приемы, средства и возможности для самостоятельного изучения иностранных языков и их применения (аудио – или видеоматериалы, средства массовой информации, компьютерные учебные программы и др.);

формирование уважения к языку и культуре носителей языка, мотивации к повышению уровня владения иностранным языком в соответствии с профессиональной деятельности.

Программой определены цели по каждой теме и спрогнозированы результаты их достижения в соответствии с уровнями усвоения учебного материала.

Содержательное лексическое наполнение тем второго раздела для каждой специальности (направление специальности), специализации производится на основе выявления основных ситуаций профессионально деятельности (предмет, средства и сфера профессиональной деятельности); требований образовательного стандарта и квалификационных характеристик специальности; требований к общепрофессиональным, специальным знаниям и умениям учащихся и носит вариативный характер, что позволяет учитывать профиль будущей специальности (направление специальности), специализации и учреждения образования

Программой определены цели изучения каждой темы, спрогнозированы результаты их достижения в соответствии с уровнями усвоения учебного материала.

В результате изучения учебной дисциплины “Иностранный язык” учащиеся должны

знать на уровне представления:

роль и место иностранного языка в профессиональном становлении и развитии личности;

страноведческую информацию, обогащающую социальный и профессиональный опыт;

знать на уровне понимания:

значение активного лексического минимума по изученным темам, в том числе оценочной лексики, реплик-клише профессионального речевого этикета;

значение грамматических явлений, отмеченных в содержании программы;

языковые средства и правила речевого поведения в соответствии со сферой общения и социальным статусом партнёра по обучению;

уметь:

чтение: понимать тексты профессиональной направленности, используя основные виды чтения (ознакомительное, изучающее, поисковое / просмотровое); оценивать важность и новизну извлечённой информации и выражать своё отношение к ней. Объём текста, предназначенного для ознакомительного чтения, 3000-4000 печатных знаков с пробелами. Виды текстов: статьи, тексты профессиональной направленности, рекламные проспекты, технические документы и др.;

говорение:

вести диалог (диалог-расспрос, диалог-обмен, диалог-побуждение к действию, этикетный диалог и их комбинации) в ситуациях профессионального общения в рамках изученной тематике (количество реплик каждого собеседника не менее 7-8 фраз);

беседовать, рассказывать, рассуждать в рамках изученной проблематики и тематики;

описывать и сравнивать предметы, факты явления;

делать сообщения профессиональной направленности;

составлять монологическое высказывание – описание, сравнение, повествование, рассуждение, оценочное суждение (объём высказывания 15-20 фраз, правильно оформленных в языковом отношении);

восприятие и понимание речи на слух;

относительно полно и точно понимать высказывания собеседника в распространённых ситуациях профессионального общения; понимать основное содержание и извлекать необходимую информацию из звучащих текстов профессиональной направленности, содержащих не менее 3-4% незнакомых слов, значение которых можно понять с помощью текстовой или контекстуальной догадки (длительность звучание текста 2,5 мин);

письменная речь:

составлять и оформлять письменное сообщение в рамках изучаемой темы, объявление в соответствии с нормами, принятыми в стране изучаемого языка, делать выписки из текстов.

В программе приведены критерии оценки результатов учебной деятельности учащихся по учебной дисциплине, разработанные на основе десятибалльной шкалы и показателей оценки результатов учебной деятельности обучающихся в учреждениях среднего специального образования (постановление Министерства образования Республики Беларусь от 29.03.2004).

ТРЕБОВАНИЯ К ПРАКТИЧЕСКОМУ ВЛАДЕНИЮ ВИДАМИ РЕЧЕВОЙ ДЕЯТЕЛЬНОСТИ

Восприятие и понимание речи на слух

Развитие навыков и умений смыслового восприятия устной иноязычной речи в ситуациях профессионального общения : выделять основную информацию в воспринимаемом на слух тексте профессионального характера; относительно полно принимать речь собеседника в ситуациях профессионального общения.

Говорение

Диалогическая речь

Овладение тактикой построения диалога в соответствии с коммуникативной задачей, речевыми намерениями собеседника с учетом конкретных условий профессионально ориентированного общения с соблюдением норм речевого этикета, принятых в стране изучаемого языка.

Развитие умений участвовать в беседе, запрашивать и обмениваться информацией, высказывать и аргументировать свою точку зрения; брать на себя инициативу в разговоре; вносить пояснения, дополнения; выражать эмоции различного характера.

Монологическая речь

Построение устного монологического высказывания в соответствии с коммуникативной задачей.

Развитие умений делать общение, содержащие наиболее важную информацию по теме / проблеме профессионального характера; кратко передавать содержание полученной информации; рассуждать о фактах / событиях; делать выводы, оценивать факты.

Чтение

Совершенствование всех видов чтения на основе текстов профессионального характера. Учащиеся должны понимать тексты профессионального характера с разной полнотой, точностью и глубиной проникновения в их содержание в зависимости от вида чтения:

ознакомительное чтение – понимать основное содержание несложных текстов профессионального характера;

изучающее чтение – полно и точно понимать содержание несложных текстов профессионального характера;

просмотровое / поисковое чтение – извлекать необходимую (значимую) информацию из текстов профессионального характера.

При этом учащиеся овладевают умениями извлекать необходимую информацию, перерабатывать ее, работая с такими текстовыми материалами, как:

Тексты профессиональной направленности, в том числе руководства по эксплуатации, монтажу, ремонту, технические инструкции, технологические карты и т. п.;

надписи на ярлыках, этикетах, упаковках и т.д.

Учащиеся овладевают умениями понимать текстовые материалы:

прибегая (не прибегая) к использованию специального словаря;

используя иллюстрации, языковую догадку;

принимая во внимание сходство терминов в разных языках.

Совершенствование умения пользоваться языковой и контекстуальной догадкой при чтении текстов профессионального характера: прогнозировать содержание текста по заголовку, началу; использовать текстовые опоры – подзаголовки, таблицы, графики, шрифтовые выделения, комментарии, сноски и т.п.

Письменная речь

Конструирование письменного текста в соответствии с коммуникативной задачей.

Развитие умений сообщать сведения о своей организации в форме, принятой в стране изучаемого языка; составлять и оформлять тексты рекламных объявлений, деловых писем профессионального характера; заполнять типовые формуляры;

фиксировать необходимую информацию из прочитанного / прослушанного в ситуациях профессионального иноязычного общения.

ЯЗЫКОВОЙ МАТЕРИАЛ

Орфография

Совершенствование орфографических навыков применительно к языковому материалу тем программы.

Фонетика

Совершенствование слухо-произносительных и ритмико-интонационных навыков.

Лексика

Расширение продуктивного и рецептивного лексического минимума за счет лексических средств, обслуживающих ситуаций профессионального речевого этикета, отражающих особенности культуры страны изучаемого языка.

Накопление и расширение потенциального словаря за счет овладения словообразовательными моделями, интернациональной лексикой.

Грамматика

Совершенствование грамматических навыков.

Расширение активного и рецептивного грамматического минимума за счет грамматических средств, обслуживающих ситуации профессионального общения.

Грамматический материал:

категории числа существительного;

степени сравнения прилагательных и наречий;

глагол; видимо-временные формы глагола; пассивный, активный залог;

наклонение глагола;

модальные глаголы;

прямая и косвенная речь;

словообразование.

ТЕМАТИЧЕСКИЙ ПЛАН

Раздел, тема	Количество учебных часов
Введение	1
Раздел 1. **Вводно-коррективный курс**	3
1.1 Лексико-фонетический и орфографический материал	
Раздел 2. **Основной курс**	
2.1 Компетенции специалиста	16
2.2 Профессиональное самоопределение личности	2
2.3 Оборудование, инструменты, приспособление и материалы (сырье)	10
2.4 Производственные процессы и технологии	5
Обязательная контрольная работа	1
2.5 Ресурсосберегающие технологии. Экологическая безопасность производственных процессов	2
Итого	**40**

ОБЩИЕ МЕТОДИЧЕСКИЕ РЕКОМЕНДАЦИИ ПО ИЗУЧЕНИЮ ДИСЦИПЛИНЫ И ВЫПОЛНЕНИЮ ДОМАШНЕЙ КОНТРОЛЬНОЙ РАБОТЫ

Основной формой изучения учебной дисциплины «Иностранный язык (проф.лексика)» является самостоятельная работа учащихся над учебниками и учебными пособиями. Учебным планом предусмотрены установочное и обзорное занятие. Установочное занятие проводится перед изучением дисциплины с целью ознакомления учащихся с ее содержанием и методикой ее дальнейшего изучения. Обзорные занятия проводятся в период лабораторно-экзаменационной сессии после самостоятельного изучения учащимися дисциплины, с целью помочь систематизировать знания, полученные в процессе изучения, и ответить на возникшие при этом вопросы.

Домашнюю контрольную работу следует выполнять строго в соответствии с установленным вариантом.

Задания, выполненные не по своему варианту, не засчитываются и возвращаются учащемуся.

Контрольная работа выполняется в соответствии с требованиями Стандарта организации СТО БГПК 001-2011.

Общие требования к текстовым документам:

Титульный лист является первым листом контрольной работы и оформляется в соответствии с приложением Д – для домашней контрольной работы данного стандарта. (В скобках на примерах выполнения указан размер шрифта). Тестовую часть контрольной работы выполняют любым из следующих способов:

- машинописным по ГОСТ 2.106: текст печатается на одной стороне листа через 1 интервал, шрифт Times New Roman, размер 14, выравнивание по ширине, отступ 1,25;
- рукописным чертежным шрифтом по ГОСТ 2.304. Следует писать четко.

Таблица для выбора варианта контрольной работы

Последняя цифра номера зачетной книжки											
Предпоследняя цифра номера зачетной книжки		**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
	0	1	2	3	4	5	6	7	8	9	10
	1	11	12	13	14	15	16	1	2	3	
	2	5	6	7	8	9	10	11	12	13	1
	3	15	16	1	2	3	4	5	6	7	
	4	9	10	11	12	13	14	15	16	1	
	5	3	4	5	6	7	8	9	10	11	1
	6	13	14	15	16	1	2	3	4	5	
	7	7	8	9	10	11	12	13	14	15	1
	8	1	2	3	4	5	6	7	8	9	1
	9	11	12	13	14	15	16	1	2	3	

Вариант 1

1. Прочитать перевести текст письменно.

WHAT IS ELECTRONICS?

Electronics is a rather young science. It belongs to the twentieth century. Within a short period it has become a powerful means of progress. Electronics surrounds us everywhere. Television, radio-receiving, taperecording – are all based on electronics. The ideas of electronics are embodied in computer technology and means of automation, biology and genetics which have advanced biotechnology as a new branch of the national economy. Electronic computers are widely used in scientific research and different fields of industry. Very complicated electronic systems control the work of huge plants and power stations; even whole industries are controlled by electronic robots. Planes and rockets also electronically controlled. Electronics has sharpened our vision and chance to see the microworld more clearly. It helps us discover new and puzzling phenomena of nature. Due to electronics the first man-made sputnik was launched into space, and now man has already set his foot on the Moon, sends probes to distant planets. Radioelectronic systems ensure reliable communication with space probes at distances of millions of kilometers, relay telephotos of distant planets. The greatest application of electronics is in the field of communications. The range of radio communication in space is extending more and more. There is every reason to believe1 that radio links may be set over distances of 100 million kilometers or even more. Now we cannot imagine our life without electronics. But it all began with the invention of radio. It was Russian scientist A.S. Popov who discovered the principles of wireless communication that finally led to the development of electronic tubes for use in various communication devices.

2. Составить письменно 5 вопросов к тексту.

3. Раскрыть скобки, используя глагол в пассивном залоге. Предложения перевести.

1. The telegram (receive) tomorrow.
2. I (give) a very interesting book last week.
3. He always (laugh at).
4. Nick (invite) to the conference last week.
5. Flowers (sell) in the shops.
6. This text (translate) from 5 p.m. till 7 p.m. yesterday.

4 . Раскройте скобки, употребляя глаголы в требующейся форме условного наклонения. Предложения перевести.

1. Would they come if we (to invite) _____them?
2. The boss (be) _____ very disappointed if you aren't at the meeting tomorrow.

3. The teacher said, “I’ll begin the lesson as soon as Jack _____ (stop) talking.”

4. The old gentleman doesn’t go out in winter. He _____ (go) out if the weather gets warmer.

5. She’s flying to Cairo tomorrow. She’ll send her family a telegram providing she _____ (arrive) with a delay.

5.Вставить в предложение наречие или прилагательное в нужной степени сравнения. Предложения перевести.

1. It's becoming ***(hard)*** and ***(hard)*** to find a job.
2. Your work isn't very good. I'm sure you can do ***(well)*** than this.
3. You're standing too near the camera. Can you move a bit ***(far)*** away?
4. Martin drove ***(slowly)*** than usual.
5. We have to walk ***(fast)*** than this if we want to catch the train.
6. This word is ***(widely)*** used in spoken English than in written.

6. Записать 5 -6 предложений на тему «Почему я выбрал данную профессию?»

Вариант 2

1. Прочитать перевести текст письменно.

THE DEVELOPMENT OF RADIO

Many developments contributed to the flowering1 of commercial radio. By 1930 wireless telegraphy- was more than 50 years old. Carrier systems were widely used to multiplex voice signals for long-distance transmission. Engineers made radio an electronic success. If one development paced the growth of radio more than any other,3 it was that of the vacuum tube. The triode had been invented by de Forest as far back as 1906, and by 1930 it was generally' recognized that improvements in every aspect of transmission and reception of radio signals could be attained most easily by improving the vacuum tube. So the tubes and other equipment advanced side by side.

At the right time the superheterodyne receiver emerged, for example. This circuit led to larger coils and less shielding for the entire tuning system. When it became necessary to compensate for oscillator drift, bimetal temperature-compensating capacitors moved to centre stage.4 One after another the technical challenges were met.5

Commercial radio broadcasting began with medium-wave transmitters. These had wavelengths of 300 to 500 meters and powers of about 3 kilowatts, but were not reliable beyond 40 kilometers.

Relay stations were set up to retransmit programs to localities outside the range of the main stations. Transmission lines carried programs from one relay centre to another.

An important development was short-wave transmission, the use of wavelengths of 10 to 100 m. It relied on reflection from ionized layers in the upper

atmosphere and could cover thousands of miles.

The fidelity of amplitude-modulated radio improved steadily.

The high-gain triode had been fully developed in 1927. The development of the four element tetrode occurred about that time and the resulting increase in tube gain improved receiver sensitivity. Then receiving and small-power rf pentodes were invented and the result was a tube that had very high gain, high plate resistance, and uniform characteristics. This was the most productive era in the history of vacuum tube development.

2. Составить 5 вопросов к тексту.

3. Раскрыть скобки, используя глагол в пассивном залоге. Переведите предложения.

1. Our mother already (give) a present.
2. The letter (send) before they arrived.
3. His new book (finish) by next year.
4. Many houses (burn) during the fire.
5. Doctors (give) a new pay rise by the government.
6. Usually I (pay) my salary twice a month.

4. Раскройте скобки, употребляя глаголы в требующейся форме условного наклонения. Переведите предложения.

1. If the plane had left on time, they _____ (be) in Minsk now.
2. If they hadn’t walked 40 km, they _____ (not / be) exhausted now.
3. What would have become of us, if I _____ (come) to you then!'
4. He would have been scrupulous — if he (can) _____!
5. What is the answer if you (add) _____ 17 to 75?

5. Вставить в предложение наречие или прилагательное в нужной степени сравнения. Переведите предложения.

1. Let me ask him. I know him ***(well)*** than you do.
2. Jim did ***(badly)*** in his examination than he had hoped.
3. Could you speak a bit ***(distinctly),*** please?
4. I don't play tennis much now. I used to play ***(often).***
5. We should run ***(fast)*** if we want to catch the bus.
6. The Earth goes round the Sun ***(quickly)*** than the Jupiter.

6. Записать 5 -6 предложений на тему «Почему я выбрал данную профессию?»

Вариант 3

1. Прочитать, перевести текст письменно.

RADAR

One of the wonderful applications of electronics is radar.

Like other communication systems, radar (an acronym for radio detection and ranging) did not emerge1 suddenly. Many researchers contributed to its development.

The reflection of radio waves from aircraft had been observed in England in the early 1930s and the possibility for aircraft detection was discussed in 1934. It was soon realized that radio waves would be the ideal alternative to the existing inadequate acoustic warning equipment, which merely listened lor the sound of aircraft engines and had too short a range for proper- warning of approach of last aircraft. In contrast, experiments indicated that radar could give a warning when the aircraft was 100 miles or more away. v

The principles of radar in a simplified form might he stated as follows;

1) electromagnetic radiation at high radio frequencies is used to detect and locate remote reflecting objects;

2) the radiation is sent out in pulses of a few microseconds' duration, separated by intervals many times the duration of each pulse;

3) the pulses are returned from the reflecting objects and the returns are detected and displayed by receiving equipment placed at the point of transmission;

4) the distance to the objects is determined by measurement of the time it took the pulses to reach the targets from the transmission equipment and return to it;

5) the directions of the targets are determined by use of highly directive radio antennas.

Radars were first developed for aircraft detection, ship detection, weapon-fire control, navigation and identification systems. Many were later used in other sectors; one of the examples is the weather forecasts, detection of storms.

2. Составить к тексту 5 вопросов.

3. Раскрыть скобки, используя глагол в пассивном залоге. Переведите предложения.

1.Switch on the radio. The President's speech (broadcast) now.
2. My husband just (offer) an interesting job in this firm.
3. For two years Tyler (tell) that his brother was dead.
4. The injured man couldn't walk and had (carry).
5. She (ask) to come here tomorrow, too.
6. The museum (not open) by last April.
7. Brian told me he (rob) in the street.

4. Раскройте скобки, употребляя глаголы в требующейся форме условного наклонения. Переведите предложения.

1. Would they come if we (to invite) _____them?
2. The boss (be) _____ very disappointed if you aren't at the meeting tomorrow.
3. The teacher said, "I'll begin the lesson as soon as Jack _____ (stop) talking."
4. The old gentleman doesn't go out in winter. He _____ (go) out if the weather gets warmer.

5. She’s flying to Cairo tomorrow. She’ll send her family a telegram providing she _____ (arrive) with a delay.

5. Вставить в предложение наречие или прилагательное в нужной степени сравнения. Переведите предложения.

1. If you want to pass your exams, you should do your homework ***(regularly).***
2. David plays football and tennis much ***(well)*** than last year.
3. She always arrives at work much ***(early)*** than anyone else.
4. The children are behaving far ***(badly)*** than they normally do.
5. Of all animals in the world, which one lives ***(long)?***
6. He speaks French ***(fluently)*** than his sister.

6. Записать 5 -6 предложений на тему «Почему я выбрал данную профессию?»

Вариант 4

1. Прочитать перевести текст письменно.

FROM THE HISTORY OF TELEVISION

Unlike digital computers — which started out as mechanical devices and then went through a brief electromechanical period during the 1930s, finally becoming electronic only in the 1940s — television was an electrical medium from the very beginnings.

Attempts to send images over distances with the use of electricity date to 1876, the year Alexander Graham Bell invented the telephone.

The first television invention that had practical consequences was the “electrical telescope’’, patented by Paul Nipkow1 in 1884. At the heart of his camera was the now famous Nipkow disk. It had 24 holes equally spaced along a spiral near the periphery of the disk. The image to be transmitted was focussed on a small region at the disk’s periphery, and the disk was made to spin at 600 revolutions per minute. As the disk rotated, the sequence of holes scanned the image in a straight line. A lens behind the image region collected the sequential light samples and focussed them on a single selenium cell. The cell would then produce a succession of currents, each proportional to the intensity of the light on a different element of the image.

At the receiving end. Nipkow proposed using a magneto-optic (Fara- day-effect) light modulator to vary the intensity of the reconstructed image. To form the image, a second disk, identical to and rotating synchronously with the one at the transmitter, would be needed.

One step closer to reality was Boris Rosing of the Technological In stitute of St. Petersburg University in Russia, who in 1907 developed a TV system that used mechanical scanning on the transmitting end and the Braun CRT as a receiver.

Zworykin’s most critical invention was the first iconoscope camera tube, which he patented in 1923. The key to its success was the fact that its silvered-mica

photocathodes stored the charges induced by the image that was focussed on them until the scanning electron beam simultaneously neutralized the charges and modulated itself.

A year after he invented the iconoscope, Zworykin invented the kinescope — a TV picture tube — thus becoming responsible for both the key transmitting and receiving elements of electronic television.*

2. Составить 5 вопросов к тексту.

3. Раскрыть скобки, используя глагол в пассивном залоге. Переведите предложения.

1. The telegram (receive) tomorrow.
2. I (give) a very interesting book last week.
3. He always (laugh at).
4. Nick (invite) to the conference last week.
5. Flowers (sell) in the shops.
6. This text (translate) from 5 p.m. till 7 p.m. yesterday.

4 . Раскройте скобки, употребляя глаголы в требующейся форме условного наклонения. Переведите предложения.

1. Would they come if we (to invite) _____them?
2. The boss (be) _____ very disappointed if you aren't at the meeting tomorrow.
3. The teacher said, "I'll begin the lesson as soon as Jack _____ (stop) talking."
4. The old gentleman doesn't go out in winter. He _____ (go) out if the weather gets warmer.
5. She's flying to Cairo tomorrow. She'll send her family a telegram providing she _____ (arrive) with a delay.

5. Вставить в предложение наречие или прилагательное в нужной степени сравнения. Переведите предложения.

1. John is studying a lot ***(hard)*** than usual now that his exams are getting closer.
2. They normally play ***(well)*** than they did last night.
3. She runs ***(fast)*** of all the girls in her class.
4. Mike can play the guitar ***(well)*** than Sarah.
5. They arrived ***(early)*** than I had expected.
6. If he had driven ***(carefully),*** he wouldn't have got into an accident.

6. Записать 5 -6 предложений на тему «Почему я выбрал данную профессию?»

Вариант 5

1. Прочитать перевести текст письменно.

COLOUR TELEVISION

The technical problems of colour television have been solved long ago — a German patent for the transmission of images in colour was taken out by the physicist, Otto von Bronk, as far back as 1902 — but the high cost of the equipment, especially receivers, has held up1 its general introduction. In America, television programmes in colour have been transmitted since the early 1950's to a limited number of viewers who can afford2 the extra cost, and an experimental service began in Britain in 1955. Japan started its regular colour service in the autumn of 1960: a year later there were already 15,000 receiving sets in operation, although the price of a colour set was still eight times as much as that of a black-and-white receiver. Then the Soviet Union, too, has introduced a colour television service.

No doubt colour television will eventually supersede3 black-and-white transmissions. But there are other revolutionary developments to come, such as the "flat4 screen — it will replace the conventional receiver box with its cathode-ray tube. The first screen, which can be hung on the wall like a picture, may be no more than 2 to 3 inches thick. It has a fluorescent coating like conventional tubes, but the electrons from the cathode move almost parallel with it instead of striking it at a right angle. They start their journey from an electronic "gun5 at the top behind the screen, shooting downwards; at the bottom they are reflected by a "reversing lens to travel vertically upwards along the screen, which they eventually hit by the influence of a grid7 of conductors which accumulate electric charges from the electron beam and give them off to the screen. The flat screen will be especially suitable for colour reception.

2. Составить 5 вопросов к тексту.

3. Раскрыть скобки, используя глагол в пассивном залоге. Переведите предложения.

1. Switch on the radio. The President's speech (broadcast) now.
2 . My husband just (offer) an interesting job in this firm.
3 . For two years Tyler (tell) that his brother was dead.
4. The injured man couldn't walk and had (carry).
5. She (ask) to come here tomorrow, too.
6. The museum (not open) by last April.
7. Brian told me he (rob) in the street

4. Раскройте скобки, употребляя глаголы в требующейся форме условного наклонения. Переведите предложения.

1. If the plane had left on time, they _____ (be) in Minsk now.
2. If they hadn't walked 40 km, they _____ (not / be) exhausted now.
3. What would have become of us, if I _____ (come) to you then!'

4. He would have been scrupulous — if he (can) _____!
5. What is the answer if you (add) _____ 17 to 75?

5. Вставить в предложение наречие или прилагательное в нужной степени сравнения. Переведите предложения.

1. Of all children Helen writes ***(fast).***
2. She sings ***(beautifully)*** than anyone else I've ever heard.
3. Eight is late — could you possibly get here any ***(early)!***
4. My mother cooks much ***(good)*** than me.
5. We have to walk ***(fast)*** than this if we want to catch the train.
6. Would you speak a bit ***(distinctly),*** please?
7. He doesn't play football now. He used to play ***(often).***

6. Записать 5 -6 предложений на тему «Почему я выбрал данную профессию?»

Вариант 6

1. Прочитать перевести текст письменно.

DIGITAL TELEVISION

The so-called analogue systems of television are to be superseded by digital systems in the near future. Using this new system, Soviet experts have managed to encode and compress flows of visual information to the extent that the requirement in the carrying capacity of communication channels has been cut by nearly 86 per cent.

The advantages of digital techniques over analogue electronic systems have demanded that they be used in television. These advantages improve the quality of the picture. While in the analogue system of recording signals noises and errors invariably accumulate at every stage of their transmission or copying, digital recording is almost free of signal errors.

How does digital television work? Basically it performs by splitting the continuous analogue signal into a series of separate pulses. A continuously varying electric signal generated by a usual broadcasting camera is fed into an electronic device which converts it into pulses. These pulses represent binary recordings of the signal’s values at any given moment. At the receiving end of the circuit, the digital signal of binary pulses can be unscrambled back into the analogue signal which is then fed into ordinary TV sets. But the advantages of digital techniques can themselves be used in TV sets in order to improve their reception qualities considerably.

Digital TV. however, has its disadvantages. The main one lies in the tremendous scope of information to be transmitted. And it must be done at the rate of 216 million pulses per second. This great flow of information is rather difficult and extremely expensive to transmit over great distances by the technical means available today.

Soviet researchers studying this problem have found help in the principles they

observed in living nature. And the efforts of Soviet researchers in this field are internationally recognized.

2. Составить 5 вопросов к тексту

3. Раскрыть скобки, используя глагол в пассивном залоге. Переведите предложения.

1 . Our mother already (give) a present.
2 . The letter (send) before they arrived.
3 . His new book (finish) by next year.
4 . Many houses (burn) during the fire.
5 . Doctors (give) a new pay rise by the government.
6 . Usually I (pay) my salary twice a month.

4 . **Раскройте скобки, употребляя глаголы в требующейся форме условного наклонения. Переведите предложения.**

1. If Felix (to be) _____ here I would have seen him.
2. Michael would not agree even if you (to ask) _____ him.
3. If they (mention) _____ this yesterday, everything would have been done.
4. If I (to find) _____ that letter, I'll show it to you.
5. If I meet him, I (to invite) _____ him.

5. Вставить в предложение наречие или прилагательное в нужной степени сравнения. Переведите предложения.

1) You are standing too near the camera. Could you move a bit ***(far)*** away?
2) The ***(much)*** you read, the ***(soon)*** you enlarge your vocabulary.
3) They put out the fire much ***(quickly)*** than we had expected.
4) These days he takes all the things ***(seriously)***.
5) Your Chinese is improving. It's getting ... (good).
6) It's becoming ... (hard) to find a job.

6. Записать 5 -6 предложений на тему «Почему я выбрал данную профессию?»

Вариант 7

1. Прочитать перевести текст письменно.

LASER

Laser is a wonder child of quantum physics. Quantum physics came into being in 1954 when Soviet scientists Alexander Prokhorov and Nikolai Basov in the USSR and Charles Towns in New York simultaneously and independently discovered the generation of radio waves in molecular beams.

A laser is a quantum electronic device. It is a machine for making and concentrating light waves into a very intense beam. The letters LASER stand for

Light Amplification by Stimulated Emission of Radiation. The light made by a laser is much more intense than ordinary light. With ordinary light, all the light waves are of different lengths. With lasers, all the light waves are of the same length, and this increases the intensity.

Laser is an extremely, simple-looking device. It is nothing more than a cylinder of synthetic ruby about 1/4 inches in diameter and 1 1/2 inches long mounted in the centre of a spiral coil of glass. The coil is a xenon-filled flash tube, very much like the ones used by photographers for taking flash pictures.

At one end of the tube there is a mirror, and at the other end of the tube there is a partial mirror.

The laser beam is made by exciting the atoms of a suitable material — ruby is one — until most of the atoms have electrons orbiting in a higher energy level than usual. The excitation is then stopped and all the excited electrons fall back together, to their normal orbits, each one emitting a pulse of light of the same energy. In this way an 11 intense beam of light is generated for a very short time. And every pulse or wave-train in this beam is in step with2 every other pulse. In this way a beam of light is obtained which is both monochromatic and coherent and easy to focus. The mirror at one end of the tube reflects this light. It can only escape at the other end of the tube.

2. Составить 5 предложений к тексту.

3. Раскрыть скобки, используя глагол в пассивном залоге. Переведите предложения.

1 . The telegram (receive) tomorrow.
2 . I (give) a very interesting book last week.
3 . He always (laugh at)
4 . Nick (invite) to the conference last week.
5 . Flowers (sell) in the shops.
6 . This text (translate) from 5 p.m. till 7 p.m. yesterday.

4 . Раскройте скобки, употребляя глаголы в требующейся форме условного наклонения. Переведите предложения.

1.Would they come if we (to invite) _____them?

2.The boss (be) _____ very disappointed if you aren't at the meeting tomorrow.

3. The teacher said, "I'll begin the lesson as soon as Jack _____ (stop) talking."

4. The old gentleman doesn't go out in winter. He _____ (go) out if the weather gets warmer.

5. She's flying to Cairo tomorrow. She'll send her family a telegram providing she _____ (arrive) with a delay.

5. Вставить в предложение наречие или прилагательное в нужной степени сравнения. Переведите предложения.

1) The suitcases seemed to get ... (heavy) as I carried them along the road.
2) The hole in your cardigan is getting ... (big).
3) As the day went on, the weather got ... (bad).
4) Nowadays travelling is becoming ... (expensive).
5) These days ... (many)people are learning English.
6) Since mv brother has been in Spain, his Spanish is getting ... (good).
7) As far as I know, he is ... (satisfied) with his job.

6. Записать 5 -6 предложений на тему «Почему я выбрал данную профессию?»

Вариант 8

1. Прочитать перевести текст письменно.

WHAT IS THE LASER USED FOR?

The range of the lasers use is expanding with every passing year. The use of picosecond laser pulses will help to build faster and more powerful microchips, information circuits and computers by mapping more exactly the routes electrons take through semiconductor materials, the rates they travel and the effects of impurities.*

New lasers will help research on interactions among molecules in liquids.

Lasers are widely used in medicine. In Moscow an All Union Centre for Using Lasers in Surgery has been set up. The first step was made in 1970 by Professor A. Vishnevsky who used a small-capacity laser in stallation experimenting on animals .

Soviet scientists have produced Scalpel-1 installation which is widely used in our country and is exported to many other countries.

Lasers are used in biology and in agriculture. Soviet scientists, have developed a new instrument - the laser projection microscope (the work received the USSR State Prize). The tremendous brightness of laser radiation makes it possible to project clear images of microobjects onto large screens, magnified 15,000 times.

Laser beams make it possible not only to transmit light energy over great distances, but also to encase it in very thin glass filaments-waveguides. It is possible to transmit simultaneously thousand telephone conversations and many TV programmes over a single guide a tenth of a millimeter thick.

In the production of electronic components lasers are used in such operations as microwelding, resistor trimming, etc., something that can be performed perfectly well today. Technological lasers are coming into use in tempering metal instruments and other surfaces subjected to considerable strain, making their service life several times longer, in low-waste cutting of workpieces, and reliability welding.

The use of laser methods for non-impact diagnostics has allowed production of systems for precision measurements.

2. Составить к тексту 5 вопросов.

3. Раскрыть скобки, используя глагол в пассивном залоге. Переведите предложения.

1. The telegram (receive) tomorrow.
2. I (give) a very interesting book last week.
3. He always (laugh at)
4. Nick (invite) to the conference last week.
5. Flowers (sell) in the shops.
6. This text (translate) from 5 p.m. till 7 p.m. yesterday.

4. Раскройте скобки, употребляя глаголы в требующейся форме условного наклонения. Переведите предложения.

1. Would they come if we (to invite) _____them?
2. The boss (be) _____ very disappointed if you aren't at the meeting tomorrow.
3. The teacher said, "I'll begin the lesson as soon as Jack _____ (stop) talking."
4. The old gentleman doesn't go out in winter. He _____ (go) out if the weather gets warmer.
5. She's flying to Cairo tomorrow. She'll send her family a telegram providing she _____ (arrive) with a delay.

5. Вставить в предложение наречие или прилагательное в нужной степени сравнения. Переведите предложения.

1) It's becoming ***(hard)*** and ***(hard)*** to find a job.
2) Your work isn't very good. I'm sure you can do ***(well)*** than this.
3) You're standing too near the camera. Can you move a bit ***(far)*** away?
4) Martin drove ***(slowly)*** than usual.
5) We have to walk ***(fast)*** than this if we want to catch the train.
6) This word is ***(widely)*** used in spoken English than in written.

6. Записать 5 -6 предложений на тему «Почему я выбрал данную профессию?»

Вариант 9

1. Прочитать перевести текст письменно.

SOME MORE ABOUT LASERS

Over the past decade, Edinburgh Instruments1 have proved themselves to be leading technical innovators in the field of infra-red gas lasers. The PL series of lasers produced by Edinburgh Instruments are ideally suited to a large number of applications, in the scientific, industrial and medical fields. The wide tuning range and excellent frequency stability of the PL series make them ideal tools for high resolution molecular spectroscopy (Stark and Zeeman effects, magnetic resonance, double resonance, opto-acoustic spectroscopy, matrix isolation techniques) and solid

state spectroscopy (non-linear optics, mixing, spin flip Raman scattering; non-linear absorption and dispersion; optical bistability; magneto-optics; spin resonance).

The high stability of any Edinburgh Instruments laser are highly desirable characteristics for infra-red interferometers used in testing distortion and deformation of transmitting materials, lenses and optical surfaces.

The PL series can be used in long term studies of atmospheric conditions, they are particularly suitable for pollution detection and monitoring.

Laser applications in industry are centred around cutting, drilling, welding and soldering operations. Lasers have many advantages over conventional machine tools. Laser machining is a non-contact process. This means that there is no material distortion, there are no tooling costs and no cutting fluid requirements, which means cleaner work areas and less time required for cleaning finished parts.

There is no swarf, since the material is evaporated and can be removed with an extractor fan'. The excellent beam quality ensures the laser output can be focussed to a small diameter spot (less than 50 microns) giving extremely high, localised intensities. Wastage is eliminated by ensuring that a minimum of material is removed during machining operation.

A wide range of functions can be performed by the same laser, by using it in any of its three modes of operation: continuous beam, chopped or pulsed.

2. Составить к тексту 5 вопросов.

3. Раскрыть скобки, используя глагол в пассивном залоге. Переведите предложения.

1. Switch on the radio. The President’s speech (broadcast) now.
2. 2 . My husband just (offer) an interesting job in this firm.
3. 3 . For two years Tyler (tell) that his brother was dead.
4. 4 . The injured man couldn’t walk and had (carry).
5. 5 . She (ask) to come here tomorrow, too.
6. 6 . The museum (not open) by last April.
7. 7 . Brian told me he (rob) in the street

4. **Раскройте скобки, употребляя глаголы в требующейся форме условного наклонения. Переведите предложения.**

1. Would they come if we (to invite) _____them?
2. The boss (be) _____ very disappointed if you aren’t at the meeting tomorrow.
3. The teacher said, “I’ll begin the lesson as soon as Jack _____ (stop) talking.”
4. The old gentleman doesn’t go out in winter. He _____ (go) out if the weather gets warmer.
5. She’s flying to Cairo tomorrow. She’ll send her family a telegram providing she _____ (arrive) with a delay.
6.

5. Вставить в предложение наречие или прилагательное в нужной степени сравнения. Переведите предложения.

1) Let me ask him. I know him ***(well)*** than you do.
2) Jim did ***(badly)*** in his examination than he had hoped.
3) Could you speak a bit ***(distinctly),*** please?
4) I don't play tennis much now. I used to play ***(often).***
5) We should run ***(fast)*** if we want to catch the bus.
6) The Earth goes round the Sun ***(quickly)*** than the Jupiter

6. Записать 5 -6 предложений на тему «Почему я выбрал данную профессию?»

Вариант 10

1. Прочитать перевести текст письменно.

MICROFXECTRONICS

Microelectronics is the technology of constructing electronic circuits and devices in extremely small packages by various techniques. *This tech nology is also referred to as microminiaturization.

The increasing complexity of electronic systems over the past 30 years has made the evolution of microelectronics inevitable.* During this period, the electron tubes in the early electronic systems have been replaced b\ solid state discrete devices and integrated circuitry: and these, in turn, are giving way to medium- and large-scale integrated circuitry."

Microelectronics today encompasses thin-film, thick-film, hybrid, and integrated circuit technology. These approaches (and combinations of them) are being applied in every branch of electronics.

Integrated circuits that combine all the elements of a complete electronic circuit on a single chip of silicon can be produced. The implications of this in the microelectronic evolution are easily demonstrated. Let us compare a conventional J/K. nip-flop circuit-incorporating solid-state discrete devices and the same type of circuit employing integrated circuitry.

The conventional circuit would require approximately 40 separate discrete elements, 200 connections, 40 hermetic seals, and 300 separate processing operations, with each operation, seal, and connection representing a possible source of failure.* However, if all the elements of this circuit are integrated upon one chip of silicon, the number of connections drops to about 14. All circuit elements are interconnected inside the package by a process known as vapour metallization; instead of 40 hermetic seals there is one, and the three hundred processing operations are reduced to approximately 30.

Before the actual fabrication of the integrated circuit begins, the silicon-crystal must be sliced into paper-thin wafers. The wafers must be lapped and polished on one side that is to be used for the active elements. Unless special processing is involved, the back side of the wafer is left in the lapped state.

Both sides of the wafer are lapped simultaneously with an abrasive (usually

aluminium oxide) until all visible traces of the saw cuts are removed.* One side of the wafer is then polished several times with slurries of abrasive grit.3 A grit of smaller size is used for each succeeding polishing step. Finally, the wafer is chemically etched to remove any irregularities in the surface resulting from the last polishing step.

The diffusion process begins when the highly polished silicon is placed in an oven, containing impurity atoms which yield the desired electrical characteristics. When the wafer has been uniformly doped, the fabrication of semiconductor devices may begin. Several hundred circuits are produced simultaneously on the wafer.

2. Составить к тексту 5 вопросов.

3. Раскрыть скобки, используя глагол в пассивном залоге. Переведите предложения.

1 . The telegram (receive) tomorrow.
2 . I (give) a very interesting book last week.
3 . He always (laugh at)
4 . Nick (invite) to the conference last week.
5 . Flowers (sell) in the shops.
6 . This text (translate) from 5 p.m. till 7 p.m. yesterday.

4 . Раскройте скобки, употребляя глаголы в требующейся форме условного наклонения. Переведите предложения.

1. If the plane had left on time, they _____ (be) in Minsk now.
2. If they hadn't walked 40 km, they _____ (not / be) exhausted now.
3. What would have become of us, if I _____ (come) to you then!'
4. He would have been scrupulous — if he (can) _____ !
5. What is the answer if you (add) _____ 17 to 75?

5. Вставить в предложение наречие или прилагательное в нужной степени сравнения. Переведите предложения.

1) If you want to pass your exams, you should do your homework ***(regularly).***
2) David plays football and tennis much ***(well)*** than last year.
3) She always arrives at work much ***(early)*** than anyone else.
4) The children are behaving far ***(badly)*** than they normally do.
5) Of all animals in the world, which one lives ***(long)?***
6) He speaks French ***(fluently)*** than his sister.

6. Записать 5 -6 предложений на тему «Почему я выбрал данную профессию?»

Вариант 11

1. Прочитать перевести текст письменно.

THE TRANSISTOR

The transistor is basically a three-section device composed of two outside sections and a middle section. The two outside sections are doped so that they are either P- or N-type, and the middle section is doped opposite to the outside sections. Transistors are typed as NPN or *PNP* according to the doping of the sections or elements. When the two outside sections are N-type semiconductors and the middle section is a P-type, the transistor is an NPN-type. When the two outside sections are P-types and the middle is N-type, the transistor is PNP-type.

The centre section of the transistor is thinner than the outside sections and is called the base One of the outside sections is called the emitter, and the other is called the collector. The functions of the emitter, base and collector can be compared to those of the cathode, grid and plate of a triode vacuum tube. These can be summarized as follows:

Emitter emits the current carriers, electrons or holes.

Base controls the current from the emitter.

Collector attracts or collects the carriers from the emitter.

Transistors are often classified according to the amount of power which they can dissipate.

There are many types of transistors as to their fabrication. For example, junction transistors are fabricated by various techniques which involve alloy, diffusion or growth processes. From hence different names of transistors: grown-junction transistor, alloy-junction transistor, diffused-junction transistor, double-diffused planar type.

Transistors are made from germanium or silicon. The same general characteristics are common to both types, but the temperature operating range of a silicon transistor is wider than that of a germanium transistor.

2.Составить 5 предложений к тексту.

3. Раскрыть скобки, используя глагол в пассивном залоге. Переведите предложения.

1 . The telegram (receive) tomorrow.

2 . I (give) a very interesting book last week.

3 . He always (laugh at)

4 . Nick (invite) to the conference last week.

5 . Flowers (sell) in the shops.

6 . This text (translate) from 5 p.m. till 7 p.m. yesterday.

4. Раскройте скобки, употребляя глаголы в требующейся форме условного наклонения. Переведите предложения.

1. Would they come if we (to invite) _____them?

2. The boss (be) _____ very disappointed if you aren't at the meeting tomorrow.

3. The teacher said, "I'll begin the lesson as soon as Jack _____ (stop) talking."

4. The old gentleman doesn't go out in winter. He _____ (go) out if the weather gets warmer.

5. She's flying to Cairo tomorrow. She'll send her family a telegram providing she _____ (arrive) with a delay.

5. Вставить в предложение наречие или прилагательное в нужной степени сравнения. Переведите предложения.

1) John is studying a lot ***(hard)*** than usual now that his exams are getting closer.
2) They normally play ***(well)*** than they did last night.
3) She runs ***(fast)*** of all the girls in her class.
4) Mike can play the guitar ***(well)*** than Sarah.
5) They arrived ***(early)*** than I had expected.
6) If he had driven ***(carefully),*** he wouldn't have got into an accident.
7) Of all children Helen writes ***(fast).***

6. Записать 5 -6 предложений на тему «Почему я выбрал данную профессию?»

Вариант 12

1. Прочитать перевести текст письменно.

WHAT IS A LASER?

Laser is a wonder child1 of quantum physics. Quantum physics came into being in 1954 when Soviet scientists Alexander Prokhorov and Nikolai Basov in the USSR and Charles Towns in New York simultaneously and independently discovered the generation of radio waves in molecular beams.

A laser is a quantum electronic device. It is a machine for making and concentrating light waves into a very intense beam. The letters LASER stand for Light Amplification by Stimulated Emission of Radiation. The light made by a laser is much more intense than ordinary light. With ordinary light, all the light waves are of different lengths. With lasers, all the light waves are of the same length, and this increases the intensity.

Laser is an extremely, simple-looking device. It is nothing more than a cylinder of synthetic ruby about 1/4 inches in diameter and 1 1/2 inches long mounted in the centre of a spiral coil of glass. The coil is a xenon-filled flash tube, very much like the ones used by photographers for taking flash pictures.

At one end of the tube there is a mirror, and at the other end of the tube there is a partial mirror.

The laser beam is made by exciting the atoms of a suitable material — ruby is one — until most of the atoms have electrons orbiting in a higher energy level

than usual. The excitation is then stopped and all the excited electrons fall back together, to their normal orbits, each one emitting a pulse of light of the same energy. In this way an 11 intense beam of light is generated for a very short time.* And every pulse or wave-train in this beam is in step with2 every other pulse. In this way a beam of light is obtained which is both monochromatic and coherent and easy to focus. The mirror at one end of the tube reflects this light. It can only escape at the other end of the tube.

Laser beams carry surprisingly intense amounts of energy and so they can be dangerous to living tissue. It is therefore necessary to protect the human eye, when laser beams are being used. The damage can be done very quickly, so protection from accident is very necessary.

A laser beam carries its energy in a compact form, until it is absorbed when it strikes something opaque.

2. Составить к тексту 5 вопросов.

3. Раскрыть скобки, используя глагол в пассивном залоге. Переведите предложения.

1 . Our mother already (give) a present.
2 . The letter (send) before they arrived.
3 . His new book (finish) by next year.
4 . Many houses (burn) during the fire.
5 . Doctors (give) a new pay rise by the government.
6 . Usually I (pay) my salary twice a month.

4. Раскройте скобки, употребляя глаголы в требующейся форме условного наклонения. Переведите предложения.

1. Would they come if we (to invite) _____them?
2. The boss (be) ____ _____ very disappointed if you aren't at the meeting tomorrow.
3. The teacher said, "I'll begin the lesson as soon as Jack _____ (stop) talking."
4. The old gentleman doesn't go out in winter. He _____ (go) out if the weather gets warmer.
5. She's flying to Cairo tomorrow. She'll send her family a telegram providing she _____ (arrive) with a delay.

5. Вставить в предложение наречие или прилагательное в нужной степени сравнения. Переведите предложения.

1) She sings ***(beautifully)*** than anyone else I've ever heard.
2) Eight is late — could you possibly get here any ***(early)!***
3) My mother cooks much ***(good)*** than me.
4) We have to walk ***(fast)*** than this if we want to catch the train.
5) Would you speak a bit ***(distinctly),*** please?
6) He doesn't play football now. He used to play ***(often).***

6. Записать 5 -6 предложений на тему «Почему я выбрал данную профессию?»

Вариант 13

1. Прочитать перевести текст письменно.

Microelectronics is the technology of constructing electronic circuit and devices in extremely small packages by various techniques. *This technology is also referred to as microminiaturization.

The increasing complexity of electronic systems over the past 30 years has made the evolution of microelectronics inevitable.* During this period, the electron tubes in the early electronic systems have been replaced b\ solid state discrete devices and integrated circuitry: and these, in turn, are giving way to medium- and large-scale integrated circuitry."

Microelectronics today encompasses2 thin-film, thick-film, hybrid, and integrated circuit technology. These approaches (and combinations of them) are being applied in every branch of electronics.

Integrated circuits that combine all the elements of a complete electronic circuit on a single chip of silicon can be produced. The implications of this in the microelectronic evolution are easily demonstrated. Let us compare a conventional J/K. nip-flop circuit-incorporating solid-state discrete devices and the same type of circuit employing integrated circuitry.

The conventional circuit would require approximately 40 separate discrete elements, 200 connections, 40 hermetic seals, and 300 separate processing operations, with each operation, seal, and connection representing a possible source of failure.* However, if all the elements of this circuit are integrated upon one chip of silicon, the number of connections drops to about 14. All circuit elements are interconnected inside the package by a process known as vapour metallization; instead of 40 hermetic seals there is one, and the three hundred processing operations are reduced to approximately 30.

*Before the actual fabrication of the integrated circuit begins, the silicon-crystal must be sliced into paper-thin wafers. The wafers must be lapped and polished on one side that is to be used for the active elements. Unless special processing is involved, the back side of the wafer is left in the lapped state.

2. Составить к тексту 5 вопросов.

3. Раскройте скобки, употребляя глаголы в требующейся форме условного наклонения. Переведите предложения.

1. If Felix (to be) _____ here I would have seen him.
2. Michael would not agree even if you (to ask) _____ him.
3. If they (mention) _____ this yesterday, everything would have been done.
4. If I (to find) _____ that letter, I'll show it to you.
5. If I meet him, I (to invite) _____ him.

4.Раскрыть скобки, используя глагол в пассивном залоге. Переведите предложения.

1. Our mother already (give) a present.
2. The letter (send) before they arrived.
3. His new book (finish) by next year.
4. Many houses (burn) during the fire.
5. Doctors (give) a new pay rise by the government.
6. Usually I (pay) my salary twice a month.

5.Вставить в предложение наречие или прилагательное в нужной степени сравнения. Переведите предложения.

1) He doesn't play football now. He used to play ***(often).***

2) You are standing too near the camera. Could you move a bit ***(far)*** away?

3) The ***(much)*** you read, the ***(soon)*** you enlarge your vocabulary.

4) They put out the fire much ***(quickly)*** than we had expected.

5) These days he takes all the things ***(seriously)***.

6)Your Chinese is improving. It's getting ... **(good).**

6. Записать 5 -6 предложений на тему «Почему я выбрал данную профессию?»

Вариант 14

1. Прочитать, перевести текст письменно.

The range of the lasers use is expanding with every passing year. The use of picosecond laser pulses will help to build faster and more powerful microchips, information circuits and computers by mapping more exactly the routes electrons take through semiconductor materials, the rates they travel and the effects of impurities.*

New lasers will help research on interactions among molecules in liquids.

Lasers are widely used in medicine. In Moscow an All Union Centre for Using Lasers in Surgery has been set up. The first step was made in 1970 by Professor A. Vishnevsky who used a small-capacity laser in stallation experimenting on animals .

Soviet scientists have produced Scalpel-1 installation which is widely used in our country and is exported to many other countries.

Lasers are used in biology and in agriculture. Soviet scientists, have developed a new instrument - the laser projection microscope (the work received the USSR State Prize). The tremendous brightness of laser radiation makes it possible to project clear images of microobjects onto large screens, magnified 15,000 times.

Laser beams make it possible not only to transmit light energy over great distances, but also to encase it in very thin glass filaments-waveguides. It is possible to transmit simultaneously thousand telephone conversations and many TV programmes over a single guide a tenth of a millimeter thick.

In the production of electronic components lasers are used in such operations as microwelding, resistor trimming, etc., something that can be performed perfectly well today. Technological lasers are coming into use in tempering metal instruments

and other surfaces subjected to considerable strain, making their service life several times longer, in low-waste cutting of workpieces, and reliability welding.

The use of laser methods for non-impact diagnostics has allowed production systems for precision measurements.

2.Составить к тексту 5 вопросов.

3.Раскройте скобки, используя глагол в пассивном залоге. Переведите предложения.

1.Switch on the radio. The President's speech (broadcast) now.
2.My husband just (offer) an interesting job in this firm.
3.For two years Tyler (tell) that his brother was dead.
4.The injured man couldn't walk and had (carry).
5.She (ask) to come here tomorrow, too.
6.The museum (not open) by last April.
7.Brian told me he (rob) in the street.

4. Раскройте скобки, употребляя глаголы в требующейся форме условного наклонения. Переведите предложения.

1. If Felix (to be) _____ here I would have seen him.
2. Michael would not agree even if you (to ask) _____ him.
3. If they (mention) _____ this yesterday, everything would have been done.
4. If I (to find) _____ that letter, I'll show it to you.
5. If I meet him, I (to invite) _____ him.

5.Вставить в предложение наречие или прилагательное в нужной степени сравнения. Переведите предложения.

1) It's becoming ***(hard)*** and ***(hard)*** to find a job.
2) Your work isn't very good. I'm sure you can do ***(well)*** than this.
3) You're standing too near the camera. Can you move a bit ***(far)*** away?
4) Martin drove ***(slowly)*** than usual.
5) We have to walk ***(fast)*** than this if we want to catch the train.
6) This word is ***(widely)*** used in spoken English than in written.

6. Записать 5 -6 предложений на тему «Почему я выбрал данную профессию?»

Вариант 15

1. Прочитать, перевести текст письменно.

Unlike digital computers — which started out as mechanical devices and then went through a brief electromechanical period during the 1930s, finally becoming electronic only in the 1940s — television was an electrical medium from the very beginnings.

Attempts to send images over distances with the use of electricity date to 1876, the year Alexander Graham Bell invented the telephone.

The first television invention that had practical consequences was the “electrical telescope’’, patented by Paul Nipkow1 in 1884. At the heart of his camera was the now famous Nipkow disk. It had 24 holes equally spaced along a spiral near the periphery of the disk. The image to be transmitted was focussed on a small region at the disk’s periphery, and the disk was made to spin at 600 revolutions per minute. As the disk rotated, the sequence of holes scanned the image in a straight line. A lens behind the image region collected the sequential light samples and focussed them on a single selenium cell. The cell would then produce a succession of currents, each proportional to the intensity of the light on a different element of the image.

At the receiving end. Nipkow proposed using a magneto-optic (Fara- day-effect) light modulator to vary the intensity of the reconstructed image. To form the image, a second disk, identical to and rotating synchronously with the one at the transmitter, would be needed.

One step closer to reality was Boris Rosing of the Technological In stitute of St. Petersburg University in Russia, who in 1907 developed a TV system that used mechanical scanning on the transmitting end and the Braun CRT as a receiver.

Zworykin’s most critical invention was the first iconoscope camera tube, which he patented in 1923. The key to its success was the fact that its silvered-mica photocathodes stored the charges induced by the image that was focussed on them until the scanning electron beam simultaneously neutralized the charges and modulated itself.

A year after he invented the iconoscope, Zworykin invented the kinescope — a TV picture tube — thus becoming responsible for both the key transmitting and receiving elements of electronic television.

2. Составить к тексту 5 вопросов.

3. Раскрыть скобки, используя глагол в пассивном залоге. Переведите предложения.

1 . The telegram (receive) tomorrow.
2 . I (give) a very interesting book last week.
3 . He always (laugh at)
4 . Nick (invite) to the conference last week.
5 . Flowers (sell) in the shops.
6 . This text (translate) from 5 p.m. till 7 p.m. yesterday.

4. Раскройте скобки, употребляя глаголы в требующейся форме условного наклонения. Переведите предложения.

1. If the plane had left on time, they _____ (be) in Minsk now.
2. If they hadn’t walked 40 km, they _____ (not / be) exhausted now.
3. What would have become of us, if I _____ (come) to you then!'
4. He would have been scrupulous — if he (can) _____ !

5. What is the answer if you (add) _____ 17 to 75?

5.Вставить в предложение наречие или прилагательное в нужной степени сравнения. Переведите предложения.

1) Let me ask him. I know him ***(well)*** than you do.
2) Jim did ***(badly)*** in his examination than he had hoped.
3) Could you speak a bit ***(distinctly),*** please?
4) I don't play tennis much now. I used to play ***(often).***
5) We should run ***(fast)*** if we want to catch the bus.
6) The Earth goes round the Sun ***(quickly)*** than the Jupiter.
7) If you want to pass your exams, you should do your homework ***(regularly).***

6. Записать 5 -6 предложений на тему «Почему я выбрал данную профессию?

Вариант 16

1. Прочитайте, переведите текст письменно.

Electronics is a rather young science. It belongs to the twentieth century. Within a short period it has become a powerful means of progress. Electronics surrounds us everywhere. Television, radio-receiving, taperecording – are all based on electronics. The ideas of electronics are embodied in computer technology and means of automation, biology and genetics which have advanced biotechnology as a new branch of the national economy. Electronic computers are widely used in scientific research and different fields of industry. Very complicated electronic systems control the work of huge plants and power stations; even whole industries are controlled by electronic robots. Planes and rockets also electronically controlled. Electronics has sharpened our vision and chance to see the microworld more clearly. It helps us discover new and puzzling phenomena of nature. Due to electronics the first man-made sputnik was launched into space, and now man has already set his foot on the Moon, sends probes to distant planets. Radioelectronic systems ensure reliable communication with space probes at distances of millions of kilometers, relay telephotos of distant planets. The greatest application of electronics is in the field of communications. The range of radio communication in space is extending more and more. There is every reason to believe1 that radio links may be set over distances of 100 million kilometers or even more. Now we cannot imagine our life without electronics. But it all began with the invention of radio. It was Russian scientist A.S. Popov who discovered the principles of wireless communication that finally led to the development of electronic tubes for use in various communication devices.

2. Составить к тексту 5 вопросов.

3. Раскрыть скобки, используя глагол в пассивном залоге. Переведите предложения.

1 . Our mother already (give) a present.
2 . The letter (send) before they arrived.
3 . His new book (finish) by next year.
4 . Many houses (burn) during the fire.
5 . Doctors (give) a new pay rise by the government.
6 . Usually I (pay) my salary twice a month.

4. Раскройте скобки, употребляя глаголы в требующейся форме условного наклонения. Переведите предложения.

1. Would they come if we (to invite) _____them?
2. The boss (be) _____ very disappointed if you aren't at the meeting tomorrow.
3. The teacher said, "I'll begin the lesson as soon as Jack _____ (stop) talking."
4. The old gentleman doesn't go out in winter. He _____ (go) out if the weather gets warmer.
5. She's flying to Cairo tomorrow. She'll send her family a telegram providing she _____ (arrive) with a delay.

5.Вставить в предложение наречие или прилагательное в нужной степени сравнения. Переведите предложения.

1) David plays football and tennis much ***(well)*** than last year.
2) She always arrives at work much ***(early)*** than anyone else.
3) The children are behaving far ***(badly)*** than they normally do.
4) Of all animals in the world, which one lives ***(long)?***
5) He speaks French ***(fluently)*** than his sister.
6) John is studying a lot ***(hard)*** than usual now that his exams are getting closer.
7) They normally play ***(well)*** than they did last night.

6. Записать 5 -6 предложений на тему «Почему я выбрал данную профессию?»

Содержание

Введение 3
Требование к практическому владению видами речевой деятельности 6
Примерный тематический план 8
Общие методические рекомендации по изучению дисциплины и выполнению домашней контрольной работы 9
Таблица для выбора варианта контрольной работы 10
Варианты контрольных работ 11