

Министерство науки и высшего образования Российской Федерации  
Нижекамский химико-технологический институт (филиал)  
федерального государственного бюджетного образовательного учреждения  
высшего образования  
«Казанский национальный исследовательский технологический университет»  
(НХТИ ФГБОУ ВО «КНИТУ»)



УТВЕРЖДАЮ

Заместитель директора по УР

Н.И. Никифорова

2021 г.

**ФОНД ОЦЕНОЧНЫХ СРЕДСТВ**  
по дисциплине (модулю)

Б1.О.08 «Иностранный язык в профессиональной сфере»  
(наименование дисциплины (модуля))

09.03.01 «Информатика и вычислительная техника»  
(код и наименование направления подготовки / специальности)

«Автоматизированные системы обработки информации и управления»  
(наименование профиля/программы/направленности/специализации)

БАКАЛАВР  
(квалификация)

ОЧНАЯ, ОЧНО-ЗАОЧНАЯ, ЗАОЧНАЯ  
(форма обучения)

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Зав. кафедрой иностранных языков  
(должность)


  
(подпись)

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## СОГЛАСОВАНО

Протокол заседания кафедры информационных систем и технологий, реализующей подготовку  
основной образовательной программы от «15» марта 2021г. № 7

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Ф.И.О., должность, организация, подпись

**Перечень компетенций и индикаторов достижения компетенций с указанием этапов формирования в процессе освоения дисциплины**

**Компетенция:**

УК-4 - Способен осуществлять деловую коммуникацию в устной и письменной формах на государственном языке Российской Федерации и иностранном(ых) языке(ах).

**Индикаторы достижения компетенции:**

УК-4.1 - Знает возможности и инструменты современных коммуникативных технологий для академического и профессионального взаимодействия, в том числе на иностранном языке;

УК-4.2 - Умеет применять широкий спектр современных коммуникативных технологий в профессиональной сфере, использовать приемы и методы различных коммуникаций адекватно задачам совместной академической и профессиональной деятельности, в том числе на иностранном языке;

УК-4.3 - Владеет навыками применения современных коммуникативных технологий, включая информационно-коммуникационные, для взаимодействия в академической и профессиональной среде, в том числе на иностранном языке.

Индикаторы достижения компетенции	Этапы формирования компетенции (указать все темы из РПД)				Наименование оценочного средства
	Лекции	Практические занятия	Лабораторные занятия	Курсовой проект (работа)	
УК-4.1	Не предусмотрены	Тема 1, Тема 2, Тема 3, Тема 4, Тема 5, Тема 6, Тема 7, Тема 8, Тема 9, Тема 10, Тема 11, Тема 12, Тема 13, Тема 14, Тема 15.	Не предусмотрены	Не предусмотрены	Перевод профессионально-ориентированных текстов; аннотирование; лексико-грамматический тест (очн., очн.-заоч.); контрольная работа (заоч.); экзамен
УК-4.2	Не предусмотрены	Тема 1, Тема 2, Тема 3, Тема 4, Тема 5, Тема 6, Тема 7, Тема 8, Тема 9, Тема 10, Тема 11, Тема 12, Тема 13, Тема 14, Тема 15.	Не предусмотрены	Не предусмотрены	Перевод профессионально-ориентированных текстов; аннотирование; лексико-грамматический тест (очн., очн.-заоч.); контрольная работа (заоч.); экзамен
УК-4.3	Не предусмотрены	Тема 1, Тема 2, Тема 3, Тема 4, Тема 5, Тема 6, Тема 7, Тема 8, Тема 9, Тема 10, Тема 11, Тема 12, Тема 13, Тема 14, Тема 15.	Не предусмотрены	Не предусмотрены	Перевод профессионально-ориентированных текстов; аннотирование; лексико-грамматический тест (очн., очн.-заоч.); контрольная работа (заоч.); экзамен

**Перечень оценочных средств по дисциплине (модулю)**

**III, IV семестры**

№ п/п	Тематика	Кол-во в семестр	Баллы	
			Min	Max
1	Внеаудиторное чтение	5	40	80
2	Лексико-грамматический тест / контрольная работа	1	10	20
ИТОГО			60	100

**V семестр**

№ п/п	Тематика	Кол-во в семестр	Баллы	
			Min	Max
1	Внеаудиторное чтение	5	25	40
2	Лексико-грамматический тест / контрольная работа	1	11	20
3	Экзамен	1	24	40
ИТОГО			60	100

### *Шкала оценивания*

Цифровое выражение	Выражение в баллах:	Словесное выражение	Критерии оценки индикаторов достижения при форме контроля:	
			экзамен / зачет с оценкой	зачет
5	87 - 100	Отлично (зачтено)	Оценка «отлично» выставляется студенту, если теоретическое содержание курса освоено полностью, без пробелов; исчерпывающе, последовательно, четко и логически стройно излагает материал; свободно справляется с задачами, вопросами и другими видами применения знаний; использует в ответе дополнительный материал все предусмотренные программой задания выполнены, качество их выполнения оценено числом баллов, близким к максимальному; анализирует полученные результаты; проявляет самостоятельность при выполнении заданий	Оценка «зачтено» выставляется студенту, если ответы на вопросы по темам дисциплины последовательны, логически изложены, допускаются незначительные недочеты в ответе студента, такие как отсутствие самостоятельного вывода, речевые ошибки и пр.
4	74 - 86	Хорошо (зачтено)	Оценка «хорошо» выставляется студенту, если теоретическое содержание курса освоено полностью, необходимые практические компетенции в основном сформированы, все предусмотренные программой обучения учебные задания выполнены, качество их выполнения достаточно высокое. Студент твердо знает материал, грамотно и по существу излагает его, не допуская существенных неточностей в ответе на вопрос.	
3	60 - 73	Удовлетворительно (зачтено)	Оценка «удовлетворительно» выставляется студенту, если теоретическое содержание курса освоено частично, но пробелы не носят существенного характера, большинство предусмотренных программой заданий выполнено, но в них имеются ошибки, при ответе на поставленный вопрос студент допускает неточности, недостаточно правильные формулировки, наблюдаются нарушения логической последовательности в изложении программного материала.	
2	Ниже 60	Неудовлетворительно (не зачтено)	Оценка «неудовлетворительно» выставляется студенту, если он не знает значительной части программного материала, допускает существенные ошибки, неуверенно, с большими затруднениями выполняет практические работы, необходимые практические компетенции не сформированы, большинство предусмотренных программой обучения учебных заданий не выполнено, качество их выполнения оценено числом баллов, близким к минимальному	Оценка «не зачтено» выставляется студенту, если студент не знает основных понятий темы дисциплины, не отвечает на дополнительные и наводящие вопросы преподавателя.

### Краткая характеристика оценочных средств

<i>№ п/п</i>	<i>Наименование оценочного средства</i>	<i>Краткая характеристика оценочного средства</i>	<i>Представление оценочного средства в фонде</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
1	Перевод профессионально-ориентированных текстов	Средство проверки умений выполнять устные и письменные переводы профессионально-ориентированных текстов.	Профессионально-ориентированные тексты для перевода
2	Аннотирование	Как средство оценки может продемонстрировать как уровень владения студента учебным материалом, так и сформированность общих умений работать с информацией.	Профессионально-ориентированные тексты для аннотирования
3	Лексико-грамматический тест	Система стандартизированных заданий, позволяющая автоматизировать процедуру измерения уровня знаний и умений обучающегося.	Фонд тестовых заданий
4	Контрольная работа	Средство проверки умений применять полученные знания для решения задач определенного типа по теме или разделу.	Комплект контрольных заданий по вариантам
5	Экзамен	Итоговая форма оценки степени освоения дисциплины.	Перечень вопросов к экзамену

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(НХТИ ФГБОУ ВО «КНИТУ»)

*Подготовительный факультет  
Кафедра иностранных языков*

По дисциплине Б1.О.08 «Иностранный язык в профессиональной сфере»

Направление подготовки 09.03.01 «Информатика и вычислительная техника»

Программа подготовки «Автоматизированные системы обработки информации и управления»

Квалификация (степень) выпускника БАКАЛАВР

Форма обучения ОЧНАЯ, ОЧНО-ЗАОЧНАЯ, ЗАОЧНАЯ

**Комплект профессионально-ориентированных текстов для письменного перевода и аннотирования по дисциплине Б1.Б.09 «Иностранный язык в профессиональной сфере»**

**1. OUTPUT DEVICES.  
PRINTERS.**

Printers provide information in a permanent, human-readable form. They are the most commonly used output devices and are components of almost all computer systems. Printers vary greatly in performance and design. We will classify printers as character printers, line printers and page printers in order to identify three different approaches to printing, each with a different speed range. In addition, printers can be described as either impact or nonimpact. Printers that use electromechanical mechanisms that cause hammers to strike against a ribbon and the paper are called impact printers. Nonimpact printers do not hit or impact a ribbon to print. Character printers print only one character at a time. A typewriter is an example of a character printer. Character printers are the type used with literally all microcomputers as well as on computers of all sizes whenever the printing requirements are not large. Character printers may be of several types. A letterquality printer is a character printer which produces output of typewriter quality. Letter-quality printers typically have speeds ranging from 10 to 50 characters per second. Dotmatrix printers form each character as a pattern of dots. These printers have a lower quality of type but are generally faster printers than the letter-quality printers in the range of 50 to 200 characters per second. One of the newest types of character printer is the inkjet printer. It sprays small drops of ink onto paper to form printed characters. The ink has a high iron content, which is affected by magnetic fields of the printer. These magnetic fields cause the ink to take the shape of a character as the ink approaches the paper. Line printers are electromechanical machines used for high volume paper output on most computer systems. Their printing speeds are such that to an observer they appear to be printing a line at a time. They are impact printers. The speeds of line printers vary from 100 to 2500 lines per minute. Line printers have been designed to use many different types of printing mechanisms. Two of the most common print mechanisms are the drum and the chain. Drum printers use a solid, cylindrical drum, rotating at a rapid speed. Speeds of drum printers vary from 200 to over 2000 lines per minute. Chain printers have their character set on a rapidly rotating chain called a print chain. Speeds of chain printers range from 400 to 2400 lines per minute. Page printers are high-speed nonimpact printers. Their printing rates are so high that output appears to emerge from the printer a page at a time. A variety of techniques are used in the design of page printers. These techniques, called electrophotographic techniques, have developed from the paper copier technology. Laser-beam printers use a combination of laser beam and electrophotographic techniques to create printer output at a rate equal to 18000 lines per minute.

## **2. MICROCOMPUTER SYSTEM ORGANIZATION**

The organization of a microcomputer system is the same as that of a larger computer system. The microprocessor unit (MPU), usually concentrated in a single chip, consists of the control unit and the arithmetic logical unit. Internal memory is made up of random access memory (RAM) and read-only memory (ROM). Because RAM is only temporary storage, all microcomputers require some instructions to get started after they are turned on, and these are contained in ROM. A microcomputer includes both an MPU and internal memory. The portion of the system software that is in ROM brings into RAM the additional instructions required to operate the microcomputer. Typically these instructions are stored on a magnetic disk; hence, they are called a disk operating system, or DOS. This start-up process is called bootstrapping. ROM also contains other programs that help to make personal computers easy to use, such as a programming language. Computer games are also stored in ROM cartridges. In addition to the MPU, RAM, ROM, and associated control circuits, other components, called peripheral devices, are needed to make a complete microcomputer system. The principal peripheral units are: input devices, output devices, mass storage units, and communication components. Like a DOS, the programs that control the flow of data between a microcomputer and its peripheral devices are a part of systems software. The most common input device used with personal computers is the keyboard. Most personal computer keyboards have extra keys that perform special functions and that can be used to control the movement of a cursor on a screen. A leverlike device, called a joystick, is also used as an input device, commonly for playing video games. 2. The CRT (cathode-ray tube) screen used with personal computers is called a monitor. Keyboards and monitors may be part of a single unit that also contains the microcomputer and the disc drives, or they may be separate units. Besides the monitor, the most common input units are dot-matrix and letterquality printers. Dot-matrix printers are suitable for most microcomputer applications. Letterquality printers are usually used for high-quality office correspondence. Both types of printers are considered to be low-speed character printers. Mass storage units are available over a range of capacities and access times. Floppy disks, or diskettes, are the most common mass storage media. They store patterns of bits on magnetically coated, flexible plastic platters. A floppy disk platter is sealed permanently in a paper jacket with a small window for reading and writing. Hard disk storage systems are also available. They may be fixed or removable. Some mass storage units contain both floppy and hard disk devices. Low-cost modulator-demodulator devices, called modems, that allow microcomputer systems to communicate over telephone lines have become increasingly popular. Modems permit networks of personal computer owners to exchange information or to access large data banks. These data banks may be dedicated to special applications, such as law or medicine, or they may provide a variety of consumer services.

### **3. Programming languages**

There are over 200 problem-oriented languages. The most common of them are COBOL, FORTRAN, PL/1, RPG, BASIC, PASCAL.

COBOL was the most widely used business-oriented programming language. Its name is an acronym for Common Business-Oriented Language. COBOL was designed to solve problems that are oriented toward data handling and input-output operations. Of course, COBOL can perform arithmetic operations as well, but its greatest flexibility is in data handling. COBOL also was designed as a self-documenting language. Self-documenting languages are those that do not require a great deal of explanation in order to be understood by someone reading the program instructions. The self-documenting aspect of COBOL is made possible by its sentence like structure and the very generous maximum symbolic field-name length of 30 characters. With a field-name length of up to 30 characters, the name can clearly identify the field and its purpose.

The FORTRAN IV language is oriented toward solving problems of a mathematical nature. The name FORTRAN comes from the combination of the words formula translation. The version of FORTRAN IV has been designed as algebra-based programming language. Any formula or those mathematical relationships that can be expressed algebraically can easily be expressed as a FORTRAN instruction. FORTRAN is the most commonly used language for scientific applications.

PL/I stands for programming language I. It was designed as a general-purpose language incorporating features similar to COBOL for data handling instructions and features similar to FORTRAN for mathematical instructions. PL/I is much more than a combination of the good features of both COBOL and FORTRAN, as it has many capabilities that are unique. Yet, although PL/I is one of the most versatile and the most powerful of the programming languages, it is not the most commonly used. COBOL and FORTRAN have been available for a longer period of time than PL/I, and many more users work with those languages.

RPG II is a business-oriented language. The name stands for report program generator. RPG is considerably different from other programming languages. RPG is, in effect, a large prewritten program. The programmer simply indicates the options within the master program that are to be used and, through a set of indicators, when they are to be used.

RPG was originally referred to as a "quick-and-dirty" programming language. That is, it is quick for the programmer to write and relatively inefficient in its use of main storage and processing speed. The latest version of RPG, called RPG II, greatly improved the language and gave it additional capabilities. RPG has an advantage over COBOL in that it requires less training for a programmer to become proficient in it. For this reason, RPG is commonly used on many smaller computers and in small business.

BASIC is the acronym for beginner's all-purpose symbolic instruction code. It was developed in Dartmouth College as an easy-to-learn programming language for students and inexperienced programmers. Its key design goal is simplicity. BASIC has become a very popular language in systems where many users share the use of a computer through terminals and it has become a universal language for personal computers. The language BASIC is mathematically oriented, that is, its typical use is to solve problems of a mathematical nature. Because BASIC programs are usually executed from a terminal or microcomputer where input is entered through a keyboard and printed output is relatively slow, problems of a business nature requiring large volumes of input-output data are usually not practical.

PASCAL was invented in 1970 by Professor Niklaus Wirth of Zurich, Switzerland. It was named after the mathematician Blaise Pascal, who invented one of the earliest practical calculators. PASCAL is a mathematically oriented programming language and, as such, is most commonly used in mathematics, engineering, and computer science departments of colleges and universities. This language is somewhat unusual in that it was designed to be a structured language. This means that the program must be written in logical modules which are in turn called by a main controlling module. Much of PASCAL'S popularity is due to work done at the University of California at San Diego, where PASCAL has been implemented on several different computers including microcomputers.

#### **4. Hypotheses, Theories and Laws**

When we find that an idea explains or correlates a number of facts, we call this idea a hypothesis. We can subject it to further tests and to experimental checking of deductions. If the hypothesis continues to agree with the results of experiment, we call it a theory or a law.

A theory, such as the atomic theory, usually involves some idea about the nature of some part of the Universe, a law represents a summarizing statement about observed experimental facts. For example, there is a law of the constancy of the angles between the faces of crystals. The law states that whenever we measure the angles between corresponding faces of various crystals of a pure substance, they will have the same value. It does not explain the fact. We find an explanation of the fact in the atomic theory of crystals, the theory that in crystals the atoms are in a regular order.

Chemists and other scientists use the word "theory" in two different senses. The first meaning of the word is the meaning described above – namely, a hypothesis that has been verified. The second use of the word "theory" is to represent a systematic body of knowledge, compounded of facts, laws, theories, deductive arguments and so on.

Thus, by the atomic theory we mean not only the idea that substances consist of atoms, but also all the facts about substances that can be explained and interpreted in terms of atoms and the arguments that explain the properties of substances in terms of their atomic structure.

**Ответьте на вопросы, используя информацию текста.**



1. What is a hypothesis? 2. Do you know what a law is? 3. Do you know any laws? 4. What is a theory? 5. What theories do chemists use in their work? 6. What do we mean by the atomic theory? 7. When did you hear about the atomic theory for the first time?

**Прочтите, переведите и запомните следующие выражения:**

объяснить факт, ряд экспериментов, подвергать гипотезу проверке, экспериментальное подтверждение, согласовываться с результатами, называть законом, атомная теория, такой как, обычно, включать в себя, вселенная, утверждение, например, угол между гранями кристалла, измерять, различные вещества, то же самое значение, описанный выше, и так далее, таким образом, не только... но и, с точки зрения

**5. The World's Greatest Chemist**

The periodic system of the chemical elements by Mendeleyev has long since served as the greatest history-making contribution to the study of nature. As any work of genius it shows two characteristic features: it adds more to the present knowledge, and it fruitfully develops along different directions in future.

It allowed to predict in advance the existence and properties of yet undiscovered elements. Many outstanding researchers owe to it, to a considerable degree, the ideas of their experiments, calculations, hypotheses and theories. Take, for example, the German Otto Hahn, who discovered the fission of the uranium nucleus. Or the American Glenn Seaborg who led a group of researchers that obtained, in laboratory conditions, a number of elements, including mendelevium, named in honor of Mendeleyev.

That element bears the name of the Great Russian scientist not only because Mendeleyev laid the foundation of the modern science of atom, but also because he drew his colleagues' special attention to uranium (No. 92), which at the time had closed his periodic table. A long train of transuraniums followed the once "final" uranium.

"The Mendeleyev system has served for almost 100 years as a key to discovering new elements," Seaborg wrote in 1955. It has retained its key capacity until now.

To commemorate Mendeleyev himself, the Soviet researchers named many newly discovered things on the earth or in the outer space after him: a crater on the "back" side of the Moon, an underwater ridge in the Arctic Ocean and the mineral mendeleyevite. Villages, streets and establishments such as the Moscow Institute of Chemical Technology, the Tobolsk Pedagogical Institute, the All-Russian Institute of Meteorology, the Museum of the St. Petersburg University building (where the scientist lived), the All-Russian Chemical Society, etc. have got Mendeleyev's name.

Mendeleyev, the explorer of nature, has found real immortality in his pasting heritage. The periodic system hasn't crumbled with time; on the contrary, its structure has expanded. At present it is the basis of modern teaching on substances, the structure of matter, atoms and nuclear energy.

"The greatest chemist of the world" — this is Mendeleyev's fame among modern chemists. Yes, he, the founder of modern chemistry and, to a large degree, of modern physics, considered physical chemistry his main subject, while he successfully dealt with problems in different areas, from mathematics and astronomy to meteorology, from philosophy to economics, from technology to art. "He has penetrated everywhere," the great Russian poet Alexander Blok once said.

Mendeleyev's notes on "three services to the Motherland" are quite interesting. He places work as an explorer of nature at the first place. He devoted himself to it. He tried to make his experimental and theoretical results serve society. He also devoted much of his effort to teaching, to the spread of knowledge. Finally, the third important task in Mendeleyev's life was to do his best for the economic and industrial progress of Russia.

Mendeleyev's dreams have come true. As long as seventy years ago the British magazine *Nature* (of February 24, 1934) wrote that in Russia scientists like Mendeleyev are valued and their works help to intensify the development of science, technology and industry.

**Ответьте на вопросы, используя информацию текста.**

1. Why is the periodic system by Mendeleyev valued so much? 2. Why does the element No. 101 bear Mendeleyev's name? 3. Has the periodic table changed with time? In what way has it changed? 4.

What information is it possible to get from the periodic table of elements? 5. Was D. I. Mendeleev a man of wide interests? Prove it. 6. What does the periodic law state?

**Найдите в тексте английские эквиваленты следующих словосочетаний:**

изучение природы, свойства элементов, носить имя кого-л., великий русский химик, современная химия, обратить внимание на что-л., назвать чьим-л. именем, всероссийский институт, наоборот, в настоящее время, физическая химия, основной предмет, мечты осуществились

**6. The History of the Periodic Table**

The final and most important step in the development of the periodic table was taken in 1869, when the Russian chemist Dmitry Ivanovich Mendeleev (1834-1907) made a thorough study of the relation between the atomic weights of the elements and their physical and chemical properties, with special attention to valence. Mendeleev proposed a periodic table containing seventeen columns, resembling in a general way the present periodic table without the noble gases. In 1871 Mendeleev revised this table and placed a number of elements in different positions, corresponding to revised values of their atomic weights.

The “zero” group was added to the periodic table after the discovery of helium, neon, argon, krypton and xenon by Lord Rayleigh and Sir William Ramsay in 1894 and the following years.

The periodic law was accepted immediately after its proposal by Mendeleev because of its success in making predictions with its use which were afterward verified by experiment. In 1871 Mendeleev found that by changing seventeen elements from the positions indicated by the atomic weights which had been accepted for them into new positions, their properties could be better correlated with the properties of the other elements.

Most of the elements occur in the periodic table in the order of increasing atomic weights. There still remain, however, four pairs of elements in the inverted order of atomic weight; argon and potassium (the atomic numbers of argon and potassium are 18 and 19, respectively, whereas their atomic weights are 39.948 and 39.098), cobalt and nickel, tellurium and iodine, and protactinium and thorium. The nature of the isotopes of these elements is such that the atomic weight of the naturally occurring mixture of isotopes is greater for the element of the lower atomic number in each of these pairs than for the element of higher atomic number; thus, argon consists almost entirely (99.6%) of the isotope with mass number 40 (18 protons, 22 neutrons), whereas potassium consists largely (93.4%) of the isotope with mass number 39 (19 protons, 20 neutrons). This inversion of the order in the periodic system, as indicated by the chemical properties of the elements, from that of atomic weight caused much concern before the atomic numbers of the elements were discovered, but has now been recognized as having little significance.

A very striking application of the periodic law was made by Mendeleev. He predicted the existence of six elements which had not yet been discovered, corresponding to vacant places in his table. Three of these elements were soon discovered (they were named scandium, gallium, and germanium by their discoverers), and it was found that their properties and the properties of their compounds are very close to those predicted by Mendeleev.

After helium and argon had been discovered, the existence of neon, krypton, xenon, and radon was clearly indicated by the periodic law, and the search for those elements in air led to the discovery of the first three of them; radon was then discovered during the investigation of the properties of radium and other radioactive substances.

**Ответьте на вопросы, используя информацию текста.**

1. When did Mendeleev present his periodic system? 2. Were there noble gases in his periodic table? 3. Why did Mendeleev revise his table? 4. What elements are there in Group “0”? 5. How are elements arranged in the system? 6. Why are there elements in the inverted order of atomic weights? 7. What discoveries verified Mendeleev’s predictions?

**Найдите в тексте английские эквиваленты следующих словосочетаний:**

наиболее важный шаг, периодическая таблица, отношение, атомный вес, между, особое внимание, содержать, инертный газ, пересмотреть таблицу, ряд элементов, нулевая группа, добавить к чему-л., успех, большинство элементов, в обратном порядке, атомный номер, смесь изотопов, состоять из, протон, нейтрон, главным образом, большое значение, применение, свободные места в таблице, таким образом, вскоре, химическое соединение, в воздухе, привести к

**Критерии оценки письменного перевода текста объёмом 1600 знаков**

Баллы III, IV семестр	Баллы V семестр	Коммуникативные и переводческие задачи	Языковые средства
18-20	11-12	Реализованы все коммуникативные задачи. Совершены все необходимые переводческие трансформации. Перевод звучит естественно. Переводческие навыки проявлены в достаточной мере.	Связный текст, адекватное применение лексико-грамматических средств, их диапазон широк. Языковые ошибки не существенны. Адекватно переданы функционально-стилистические особенности текста. Правильно передана структура предложения с точки зрения динамического синтаксиса (тема-рема). Сочетаемость слов, характерная для переводящего языка (ПЯ), не нарушается. Значения слов в контексте правильно поняты и для них найдены удачные эквиваленты
14-17	9-10	Коммуникативные задачи реализованы, но текст производит впечатление неестественного для переводящего языка. Не все переводческие трансформации совершены правильно. Переводческие навыки не проявлены в достаточной мере.	Достаточно связный текст, восприятие которого может быть затруднено в отдельных случаях из-за неправильно выбранного эквивалента, нарушения законов сочетаемости слов ПЯ или ошибочного понимания отдельных элементов исходного текста (ИТ). Функционально-стилистические особенности текста в основном переданы.
10-13	7-8	Реализованы не все коммуникативные задачи или часть из них реализована неадекватно. Переводческие навыки неустойчивы.	В тексте есть грубые грамматические или лексические ошибки, искажающие смысл предложений (не более 3). Структурный и лексический диапазоны заметно ограничены, связность текста нарушена. Отсутствует попытка передать функционально-стилистические особенности текста.
0-9	0-6	Коммуникативные задачи в целом не реализованы. Перевод представляет собой бессмысленный текст. Отсутствуют навыки работы со словарём (неумение выбрать нужное по контексту слово). Переводческие навыки практически отсутствуют.	Исходный текст студентом не понят. Неправильно передана структура предложений. Большое количество грубых лексико-грамматических ошибок, нарушения сочетаемости в ПЯ. Функционально-стилистические особенности текста студентом не осознаются и грубо нарушаются.

Министерство науки и высшего образования Российской Федерации  
Нижекамский химико-технологический институт (филиал)  
федерального государственного бюджетного образовательного учреждения  
высшего образования  
«Казанский национальный исследовательский технологический университет»  
(НХТИ ФГБОУ ВО «КНИТУ»)

*Подготовительный факультет  
Кафедра иностранных языков*

По дисциплине Б1.О.08 «Иностранный язык в профессиональной сфере»

Направление подготовки 09.03.01 «Информатика и вычислительная техника»

Программа подготовки «Автоматизированные системы обработки информации и управления»

Квалификация (степень) выпускника БАКАЛАВР

Форма обучения ОЧНАЯ, ОЧНО-ЗАОЧНАЯ

### **Лексико-грамматический тест I**

#### **1. Выполните письменно перевод текста.**

##### **The WORLD-WIDE WEB**

People have dreamt of a universal information database since late nineteen forties. In this database, not only would the data be accessible to people around the world, but it would also easily link to other pieces of information, so that only the most important data would be quickly found by a user. Only recently the new technologies have made such systems possible. The most popular system currently in use is the World-Wide Web (WWW) which began in March 1989. The Web is an Internet based computer network that allows users on one computer to access information stored on another through the world-wide network. As the popularity of the Internet increases, people become more aware of its colossal potential. The World-Wide Web is a product of the continuous search for innovative ways of sharing information resources. The WWW project is based on the principle of universal readership; "if information is available, then any person should be able to access it from anywhere in the world." The Web's implementation follows a standard client server model. In this model, a user relies on a program (the client) to connect to a remote machine (the server), where the data is stored. The architecture of the WWW is the one of clients, such as Netscape, Mosaic, or Lynx, "which know how to present data but not what its origin is, and servers, which know how to extract data", but are ignorant of how it will be presented to the user. One of the main features of the WWW documents is their hypertext structure. On a graphic terminal, for instance, a particular reference can be represented by underlined text, or an icon. "The user clicks on it with the mouse, and the referenced document appears." This method makes copying of information unnecessary: data needs only to be stored once, and all referenced to it can be linked to the original document.

#### **2. Ответьте на вопросы**

1. What are the main functional units of a digital computer?
2. What types of storage do you know?
3. What is a binary number system?
4. What is RAM/ROM?
5. What storage devices do you know?
6. What is the function of the CPU?
7. Name devices used for inputting information.
8. What differs PC from large computer systems?

#### **3. Подберите вместо пропусков подходящее по смыслу слово.**

1. The most common \_\_\_\_\_ for planning the program logic are flowcharting and pseudocode.  
a) technologies; b) technics; c) techniques

2. \_\_\_\_\_ was designed for dealing with the complicated mathematical calculations of scientists and engineers.  
a) COBOL; b) FORTRAN; c) PL/1
3. \_\_\_\_\_ is the foundation of any programming languages.  
a) a set of rules; b) a group of numbers; c) a lot of instructions
4. I / O \_\_\_\_\_ match the physical and electrical characteristics of input-output devices.  
a) interchanges; b) interfaces; c) interpretations
5. Letter-quality, dot-matrix and ink-jet printers are all \_\_\_\_\_ printers.  
a) line; b) page; c) character
6. The most common device used to transfer information from the user to the computer is the \_\_\_\_\_.  
a) keyboard; b) printer; c) modem
7. Input-output units link the computer to its external \_\_\_\_\_.  
a) requirement; b) development; c) environment
8. I / O devices can be classified according to their speed, visual displays being \_\_\_\_\_ devices.  
a) high-speed; b) medium-speed; c) low-speed

#### 4. Согласуйте слова в левой колонке с их интерпретацией, предложенной справа.

- |             |  |
|-------------|--|
| 1. Computer | a) an electronic device accepting data processing results from the computer system;  |
| 2. Input    | b) the unit performing arithmetic operations called for in the instructions;   |
| 3. Output   | c) the unit coordinating all the activities of various components of the computer. It reads  |
| 4. Software | information, interprets instructions, performs operations, etc.;   |
| 5. Hardware | d) a set of programs designed to control the operation of a computer;  |
| 6. Storage  | e) lists of instructions followed by the control unit of the CPU;  |
| 7. CPU      | f) an electronic device keying information into the computer;  |
| 8. CU       | g) the unit holding all data to be processed, intermediate and final results of processing;  |
| 9. ALU      | h) visible units, physical components of a data processing system;   |
| 10. Program | i) the unit that directs the sequence of system operations, selects instructions and interprets them;  |
|             | j) a device with a complex network of electronic circuits that can process information, make decisions, and replace people in routine tasks. |

#### 5. Выполните перевод грамматикализованных предложений на русский язык

1. Accuracy is one of the major items in judging a control system. The higher the accuracy of the system, the less errors the system makes. 2. The digital computer employs the principle of counting units, digits, and hence, if properly guided, gives answers which have a high degree of accuracy. 3. Electronic computers can choose which of several different operations are the right ones to make in given circumstances. Never before has mankind had such a powerful tool available. 4. In many cases man has proved to be but an imperfect controller of the machines he has created. Thus, it is natural, that wherever necessary, we should try to replace the human controller by some form of automatic controller. 5. It is necessary to draw a distinction between calculating machines and computers, the former requiring manual control for each arithmetic step and the latter having the power to solve a complete problem automatically.

#### Лексико-грамматический тест 2

##### 1. Выполните письменно перевод текста.

##### SUCCESS of the WWW

Set off in 1989, the WWW quickly gained great popularity among Internet users. What is the reason for the immense success of the World-Wide Web? Perhaps, it can be explained by CERN's attitude towards the development of the project. As soon as the basic outline of the WWW was complete, CERN made the source code for its software publicly available. CERN has been encouraging

collaboration by academic and commercial parties since the onset of the project, and by doing so it got millions of people involved in the growth of the Web. The system requirements for running a WWW server are minimal, so even administrators with limited funds had a chance to become information providers. Because of the intuitive nature of hypertext, many inexperienced computer users were able to connect to the network. Furthermore, the simplicity of the Hyper Text Markup Language, used for creating interactive documents, allowed these users to contribute to the expanding database of documents on the Web. Also, the nature of the World-Wide Web provided a way to interconnect computers running different operating systems, and display information created in a variety of existing media formats. In short, the possibilities for hypertext in the world-wide environment are endless. With the computer industry growing at today's pace, no one knows what awaits us in the 21 st century.

## 2. Ответьте на вопросы

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4. What is RAM/ROM?
5. What storage devices do you know?
6. What is the function of the CPU?
7. Name devices used for inputting information.
8. What differs PC from large computer systems?

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a) technologies; b) technics; c) techniques
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a) COBOL; b) FORTRAN; c) PL/1
3. \_\_\_\_\_ is the foundation of any programming languages.  
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| 7. CPU      | e) lists of instructions followed by the control unit of the CPU;                     |
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| 10. Program | processing;   |
|             | h) visible units, physical components of a data processing system;                    |

- i) the unit that directs the sequence of system operations, selects instructions and interprets them;
- j) a device with a complex network of electronic circuits that can process information, make decisions, and replace people in routine tasks.

**5. Выполните перевод грамматикализованных предложений на русский язык**

1. Many servomechanisms and regulators are known to be composed of a number of control elements connected in series, the output of one being used as the input to the next.
2. We expect a computer to work for at least several hours without a fault; that is to say, supposing a speed of one thousand operations per second, to perform more than ten million operations.
3. Digital programming implies the preparation of a problem for a digital computer by putting it in a form which the computer can understand and then entering this program into the computer storage unit. A problem to be solved by a digital computer must be expressed in mathematical terms that the computer can work with.
4. Among all forms of magnetic storage, magnetic tapes were the first to be proposed in connection with digital computers.
5. Programming a computer involves analyzing the problem to be solved and a plan to solve it.

### Лексико-грамматический тест 3

1. Next year I have to decide which area of medicine I want to \_\_\_\_\_.  
a) present  
b) get in  
c) hand in  
d) specialise in
2. The mass of a body is defined as the \_\_\_\_\_ of matter it contains.  
a) quality  
b) quantity  
c) measurement  
d) condition
3. A volume of space that is essentially empty of matter is called \_\_\_\_\_.  
a) capacity  
b) amount  
c) vacuum  
d) container
4. Mr. And Mrs. Cooper and a friend of \_\_\_\_\_ are coming to see us.  
a) theirs  
b) them  
c) their  
d) ours
5. This is \_\_\_\_\_ coffee I've ever tasted.  
a) gooder  
b) the best  
c) good  
d) better
6. This rent is 50 dollars \_\_\_\_\_ week.  
a) –  
b) a  
c) an  
d) the
7. I can't find my umbrella. I think somebody \_\_\_\_\_ it by mistake.  
a) took  
b) takes  
c) has taken  
d) is taking
8. If you leave the flat unlocked, you risk \_\_\_\_\_.  
a) to be burgled  
b) having been burgled  
c) to have been burgled  
d) being burgled
9. If you want to get a good job, you \_\_\_\_\_ learn foreign languages.

- a) may
- b) should

- c) ought
- d) can

10. Выберите реплику, наиболее соответствующую ситуации общения

Susan: "Hi, Mary. How's life?"

Mary: "\_\_\_\_\_".

- a) Thanks, nice to see you.
- b) Fine, thanks. And you?
- c) How do you do?
- d) Very well, thank you. What about you?

11. Выберите реплику, наиболее соответствующую ситуации общения

Student: "I hear you have defended your graduation project. Congratulations!"

Student: "\_\_\_\_\_".

- a) I wish you all the luck in the world in defending your graduation project too!
- b) You are always being late with your congratulations!
- c) Thanks ever so much!
- d) Right you are!

12. Выберите реплику, наиболее соответствующую ситуации общения

A: "Excuse me, where are the trolleys?"

B: "\_\_\_\_\_".

- a) You are quite right.
- b) Do you mean those things for carrying objects over there?
- c) Listen! I don't know it myself.
- d) They are over there.

13. The term of the \_\_\_\_\_ has a maximum duration of five years.

- a) British Parliament
- b) Parliament of New Zealand
- c) United States Congress
- d) Parliament of Australia

14. Statue of Liberty is situated in \_\_\_\_\_ .

- a) California
- b) Texas
- c) New Jersey
- d) Florida

15. Расположите части делового письма в правильном порядке.

☐ D. Barker  
Manager

☐ Yours sincerely,

☐ Unfortunately, we have not yet received the computers "OPTIMA 133" which were part of this order. We would be grateful if you could deliver these as soon as possible or refund our money.

☐ 17 May 2009

☐ Dear Mr Morrison,

☐ 67, Upper Thames Street,  
London, EC4V3AH

☐ Mr R. Morrison  
P. Marlow & Co. LTD  
21 Bird Street  
London E16TM



16. Определите, к какому виду делового документа относится представленный ниже отрывок.

I wish to complain in the strongest possible terms about the treatment I received from a member of your staff. I was billed the wrong amount of money and when I pointed to that fact I was rudely interrupted.

- |                   |                        |
|-------------------|------------------------|
| a) Inquiry Letter | c) Letter of Complaint |
| b) Memo           | d) Resume              |

**Прочитайте текст и выполните задания.**

### **Plasma Cutters**

1. Modern industry depends on the manipulation of heavy metals and alloys. We need metals to build the tools and transportation necessary for day-to-day business. The reason is simple: metals are extremely strong and durable, so they're the logical choice for most things that need to be especially big, especially sturdy, or both.

2. The funny thing is that metal's strength is also a weakness: because metal is so good at resisting damage, it's very difficult to manipulate and form into specialized pieces. People can precisely cut and manipulate the metals using the plasma cutter. The plasma cutter is actually a common tool that has been around since World War II.

3. Plasma cutters are not the only devices to harness the power of plasma. Neon signs, fluorescent lighting and plasma displays, just to name a few, all rely on it to get the job done. These devices use "cool" plasma. Though cool plasma cannot be used to cut metals, it has tons of other useful applications.

**17. Определите, какое утверждение соответствует содержанию текста.**

- a) Plasma cutter uses all the best possibilities of plasma.
- b) "Cool" plasma is a device which is applied for illumination.
- c) People use metals in building tools and transportation as they are easy to work with.
- d) The drawback of metal is in its difficulty to be manipulated and formed into specialized pieces.

**18. Завершите утверждение согласно содержанию текста.**

Modern industry relies on plasma cutters as ...

- a) metals are the most frequently used material in industry.
- b) they are common tools to manipulate with metals.
- c) plasma has a great many applications.
- d) they are the most effective devices in manipulating with metals and their alloys.

**19. Ответьте на вопрос.**

How is the effectiveness of plasma used in industry?

- a) Due to plasma cutters metals can be manipulated and formed.
- b) Metals can be manipulated both by plasma cutters and "cool" plasma.
- c) In spite of having good characteristics metals' drawback is in being manipulated primarily by plasma cutters.
- d) Plasma cutter is irreplaceable for manipulations with metals and "cool" plasma can be used for illumination.

**20. Определите основную идею текста.**

- a) It would be impossible to manipulate with metals without plasma cutters.
- b) Plasma is the latest achievement in industry designating for metals manipulation.
- c) plasma cutters are not the only devices to harness the power of plasma.
- d) Modern industry relies on plasma as it has a lot of valuable applications.

### **Лексико-грамматический тест 4**

1. You should do something more useful than philosophy – something more \_\_\_\_\_ like hotel management.

- a) vocational
- b) optional

- c) compulsory
- d) educational

2. The basic function of a computer is to \_\_\_\_\_ information.

- a) process
- b) carry out
- c) store
- d) feed

3. A branch of physics that studies the elementary subatomic constituents of matter and radiation, and their interactions is \_\_\_\_\_.

- a) electrostatics
- b) electrodynamics
- c) particle physics
- d) nuclear physics

4. Our English teacher \_\_\_\_\_ accent is clearly Scottish comes from Glasgow.

- a) whose
- b) which
- c) who
- d) whom

5. Nike \_\_\_\_\_ plays volleyball. He plays basketball instead.

- a) far longer
- b) a little longer
- c) longer
- d) no longer

6. I liked \_\_\_\_\_ essay you had brought the other day very much.

- a) –
- b) a
- c) an
- d) the

7. Jane \_\_\_\_\_ three letters so far.

- a) has written
- b) have written
- c) had written
- d) wrote

8. David is at our London office today, \_\_\_\_\_ some visitors from abroad.

- a) met
- b) to meet
- c) meeting
- d) having met

9. Little children like books with large print. They \_\_\_\_\_ read them more easily.

- a) have to
- b) must
- c) should
- d) can

10. Выберите реплику, наиболее соответствующую ситуации общения

Sister: "I'm going to the party".

Brother: "\_\_\_\_\_".

- a) All the best.
- b) Have fun!
- c) Have a good journey!
- d) I wish you every happiness!

11. Выберите реплику, наиболее соответствующую ситуации общения

Student: "Could you help me?"

Librarian: "\_\_\_\_\_".

- a) Oh, I haven't seen you for ages! Would you remind me of your last visit here?
- b) Wait a little. Can you come later?
- c) What?
- d) I'd be glad to. What is it?

12. Выберите реплику, наиболее соответствующую ситуации общения

A: "Excuse me, where are the trolleys?"

B: "\_\_\_\_\_".

- a) You are quite right.

- b) Do you mean those things for carrying objects over there?
- c) Listen! I don't know it myself.
- d) They are over there.

13. The wheel of the London Eye carries 32 sealed and air-conditioned ovoid passenger capsules, attached to its external circumference, each capsule representing one of the \_\_\_\_\_.

- a) England cities
- b) London Royal residences
- c) London Boroughs
- d) London churches

14. A traditional sweet dessert on Thanksgiving Day in the USA is a \_\_\_\_\_.

- a) pumpkin pie
- b) apple pie
- c) cheesecake
- d) rhubarb pie

15. Расположите части делового письма в правильном порядке.

☐ Dear Mr. Trowel,

☐ Yours sincerely,

☐ I would like to apply for the position of the accountant which you advertised in the International Herald Tribune of September 21.

☐ 23 September, 2010

☐ Mr. Trowel  
Deptford, Essex SD7 DJ6

☐ Megan Wight

☐ 46 Francis Drive  
Deptford, Essex SD7 OTX

16. Определите, к какому виду делового документа относится представленный ниже отрывок.

.....  
We know from the Russian Trade Delegation in London that you produce for export cotton and other natural fabrics. There is a steady demand here for good and medium quality goods of this type, especially in pale colors.

Will you please send us your catalogues and full details of your export prices and terms of payment together with any samples you can let us have.

- .....
- a) Inquiry Letter
  - b) Memo
  - c) Letter of Complaint
  - d) Cover Letter

**Прочитайте текст и выполните задания.**

### **Automation**

1. Automation is the use of control systems in concern with other applications of information technology to control industrial machinery and processes, reducing the need for human intervention. In the scope of industrialization, automation is a step beyond mechanization.

2. Automation plays an increasingly important role in the world economy and in daily experience. Engineers strive to combine automated devices with mathematical and organizational tools to create complex systems for a rapidly expanding range of applications and human activities.

3. Many roles for humans in industrial processes presently lie beyond the scope of automation. Tasks requiring subjective assessment or synthesis of complex sensory data, such as scents and sounds, as well as high-level tasks such as strategic planning, currently require human expertise. In many cases, the use of

humans is more cost-effective than mechanical approaches even where automation of industrial tasks is possible.

**17. Определите, какое утверждение соответствует содержанию текста.**

- a) People can rely on automation in all industrial processes.
- b) Automation concerns only industrial processes.
- c) The task of automation is to reduce the need for humans as it is too cost-effective.
- d) Automation is not a universal substitute of human's role in industrial processes.

**18. Завершите утверждение согласно содержанию текста.**

People need automation nowadays because ...

- a) in some cases they can't do without it.
- b) it intensifies their work greatly.
- c) it facilitates their daily life and work.
- d) it provides them with additional workplaces.

**19. Ответьте на вопрос**

How does automation benefit to people?

- a) Automation excludes people's role in industrial processes.
- b) People rely on it as their work is more cost-effective.
- c) Automation promotes further humans' development.
- d) Automation controls industrial machinery and processes, reducing the need for human intervention.

**20. Определите основную идею текста.**

- a) People rely on automation in controlling industrial processes, world economic growth.
- b) Automation has its advancements as well as shortcomings concerning the way of its application.
- c) Automation is the only way of advancement people's work and life.
- d) In spite of playing a great role in industry, world economy and people's daily activities, automation can't entirely substitute people.

Остальные варианты лексико-грамматических тестов есть в ЭИОС MOODLE. Студенты получают к нему доступ после зачисления на курс.

**Критерии оценивания лексико-грамматического теста**

Баллы III, IV семестр	Баллы V семестр	Процедура оценивания и критерии
19-20	12	Контрольные, тестовые задания выполнены полно и правильно. Возможно допущение очень незначительного количества ошибок. Правильность выполнения от 91 % и более.
15-18	10-11	Контрольные, тестовые задания в основном выполнены (выполнение от 75% и более, но менее 91%). Допущено незначительное количество ошибок (лексических, грамматических, смысловых).
10-14	8-9	Контрольные, тестовые задания выполнены не плохо, сделана основная часть (более 50% и до 75%),. Однако допущено достаточно типовых ошибок (лексических, грамматических, смысловых).
0-9	0-7	Контрольные, тестовые задания выполнены очень слабо, менее чем на половину, допущено более 50 % ошибок (лексических, грамматических, содержательных).

Министерство науки и высшего образования Российской Федерации  
Нижекамский химико-технологический институт (филиал)  
федерального государственного бюджетного образовательного учреждения  
высшего образования  
«Казанский национальный исследовательский технологический университет»  
(НХТИ ФГБОУ ВО «КНИТУ»)

*Подготовительный факультет  
Кафедра иностранных языков*

По дисциплине Б1.О.08 «Иностранный язык в профессиональной сфере»  
Направление подготовки 09.03.01 «Информатика и вычислительная техника»  
Программа подготовки «Автоматизированные системы обработки информации и управления»  
Квалификация (степень) выпускника БАКАЛАВР  
Форма обучения ЗАОЧНАЯ

**Контрольная работа № 1**  
***Вариант I***

Задание 1. Текст по специальности.

1. Прочитайте текст.

On the simplest level science is knowledge of the world of nature. Science defined simply as knowledge of natural processes has been universal among mankind since the dawn of human existence. There were many regularities in nature that people had to recognize for survival. The motion of the Sun and the Moon correlate with important terrestrial events: day and night provide the basic rhythm of human existence; the seasons determine the migration of animals needed as food and influence the agriculture. At that time nature was explained only through human senses, everything that they couldn't explain rationally was credited to the God. But mere recognition of nature regularities does not exhaust the full meaning of science. It must unite scientific methods with technology to search for answers to fundamental question: what is happening all around us in the living world.

During the Middle Ages any attempt to develop science was cruelly suppressed by the Catholic Church, but nevertheless the scientists continued to work. The names of Galileo and Paracelsus have entered the history of science and their studies have withstood years of testing and serve as a model for explaining and predicting.

The nineteenth century period was a great contribution to all branches of natural science from physics and mathematics to biology and chemistry. But it was not until the beginning of the last century when the real expansion of knowledge both in depth and range began. By 1900 nuclear energy was unknown, many chemical elements have not been identified, and no computers have been developed. Similarly, the significance of environmental changes, such as water pollution and the dumping of hazardous waste on the living world were not well understood.

The XXth century science has supplied us with direct answers to previously unknown questions, has given birth to absolutely new branches of science as nuclear physics, genetic engineering, nanotechnology, computer science. It was the time of Venus landing, fiber optics, DNA code, space stations, microchips and computers and superconductivity. The explosive increase of knowledge in the sciences has led to enormous advances in both fundamental and applied science and the development of technology.

Scientific knowledge is becoming acceptable and useful part of our lives. Science can be fascinating; the more we know science, the better we understand life. Nowadays it is a matter of simple survival for

us. The human world of the future will be greatly affected by the science; but it will not only facilitate our life – we must be ready to respond to the ethical and moral issues that step from new technologies.

Science is a means of answering questions. Learning to analyze the nature of question, to interpret data and to assess the reliability of a source will help you evaluate new information. Developing connections between new and previous knowledge assists you to detect errors in logic and the content of the material. With increased knowledge you are more prepared to cope with the problems of grown scientific knowledge, to make intelligent decisions and informed judgements in the future.

Задание 2. Задания по тексту.

I. Переведите письменно на русский язык весь текст.

II. Ответьте письменно на вопросы по тексту.

1. What is the main task of science?
2. What is the difference between fundamental and applied sciences?
3. What will the main scientific branches of the future be?
5. Why is it important to study?

III. Составьте предложения из двух частей.

- |   |  |
|---|--|
| 1. You are more prepared                      | A. withstood years of testing                |
| 2. Their studies have                         | B. will be greatly affected by the science   |
| 3. Day and night provide                      | C. will help you to evaluate new information |
| 4. Learning to analyze the nature of question | D. to cope with the problems                 |
| 5. Your life in the future                    | E. the basic rhythm of human existence       |

Задание 3. Грамматические задания

I. Вставьте нужную форму глагола to be или to have.

- |   |   |
|---|---|
| 1. There ... a telegram on the table.             | 6. He ... born in 1985.                       |
| 2. The book ... many diagrams.                    | 7. We ... students next year.                 |
| 3. There ... much snow last winter.               | 8. They ... two lectures tomorrow.            |
| 4. There ... a lot of stars and planets in space. | 9. Who ... absent today?                      |
| 5. Students ... four exams last January.          | 10. Ann doesn't ... time to go to the cinema. |

II. Образуйте сравнительную и превосходную степень от следующих прилагательных и наречий.

- |                                      |   |
|--------------------------------------|---|
| 1. large, tall, long, easy, hot, big | 2. wonderful, necessary, quickly, interesting |
|--------------------------------------|---|

III. Поставьте к следующим предложениям вопросы (общие/специальные/альтернативные/разделительные).

- |  |  |
|--|--|
| 1. There is a book on the table.   | 4. We are leaving for Moscow next week.  |
| 2. He must work hard today.  | 5. We were reading the whole evening.  |
| 3. Scientific knowledge is becoming acceptable and useful part of our lives. | 6. During the Middle Ages any attempt to develop science was cruelly suppressed by the Catholic Church |

IV. Переведите безличные предложения. Обратите внимание на их специфику.

1. It is well known that personal computers enjoy great popularity among experimenters and hobbyists.
2. It is difficult to imagine modern life with-out a computer.

3. It is quite impossible to listen to your English pronunciation: you make bad mistakes while reading.

## **Контрольная работа №1**

### **Вариант II**

#### Задание 1. Текст по специальности.

##### 1. Прочитайте текст.

What is engineering? Engineers do so many things that this question could have a very long answer. Basically, engineers use science to solve problems creatively. They apply science that is why engineering is often referred to as applied science. The principal work of an engineer is design; he has to design products, machines and production systems. When you make toast in the morning, phone your friend or fly in a plane, you experience the work of an engineer. Moon landings, cellular phones and satellites orbiting through space are possible because of engineers. Engineers are involved with the design, construction and operation of everything from razor blades and microchips to skyscrapers and bridges.

The result of rapid expansion of scientific knowledge was an increase in number of engineering specialties. By the middle of the last century they included civil, military, mechanical, mining and metallurgical engineering; then agricultural, chemical and electrical were added. This growth continued and nowadays we have aerospace, nuclear, computer, electronic, medical and industrial engineering as well. Today the specialists in engineering are so diversified that it is impossible to classify them satisfactory. There are almost 200 different types of engineering nowadays!

Technological and industrial process depends on a scientist, an engineer and a technologist; each makes major contribution to progress and plays an important role in the modern world. An engineer depends upon the scientist for new knowledge and upon the technologist for specialized assistance in translating plans into operating reality. He must have a basic knowledge of the sciences and understanding of the abstract techniques of the research engineer and he should know much of the technology employed by technologists. Perhaps the most important function of an engineer is to integrate the abstract-theoretical world and the technical-practical world. Every engineer is a member of a team often headed by a system engineer who must be able to combine the advantages of different branches.

Engineering is often defined as making practical application of theoretical sciences such as physics and mathematics. But it is impossible to cover all the subjects which an engineer may find useful in a lifetime. The education and training of an engineer must be a partnership between industry and higher education, between theory and practice. Another result of the increase in scientific knowledge is that engineering has become a profession that requires specialized advanced education. Today it must include at least 4 or 5 years of university studying leading to a Bachelor of Science degree: although technology is advancing rapidly, the underlying scientific theories and principles it is based on are constant. More often engineers, especially those engaged in research, get an advanced Master's or Doctor's degree. Engineers require specialized knowledge and intensive preparation with continued study after graduating from the university. Engineering education must become a lifetime study: to compete successfully every engineer must keep up with changes in his profession.

The profession has a strong organizational structure, requires high standards, and operates in the public service. Professional engineers must follow a code of professional conduct and ethics and a series of legal requirements. They have to be technically competent and operate with responsibility in conformity with accepted notions of professionalism. For an engineer the result of his labour – be it a bridge, air-conditioning unit, automobile or computer – is interposed between himself and the user. However, since people's lives are often at stake if an error is made, a high level of competence is essential.

#### Задание 2. Задания по тексту.

I. Переведите письменно на русский язык весь текст.

II. Ответьте письменно на вопросы по тексту.

1. What do you know about the profession of engineer?
2. Why have you chosen this profession?
3. How many engineering specialties do you know?
4. What education does engineering require?
5. Why do engineers need a high level of competence?

III. Составьте предложения из двух частей.

- |  |   |
|--|---|
| 1. The most important function of an engineer is         | A. a code of professional conduct and ethics and a series of legal requirements.  |
| 2. Professional engineers must follow                    | B. was an increase in number of engineering specialties.                          |
| 3. Engineers use science                                 | C. to solve problems creatively.  |
| 4. The result of rapid expansion of scientific knowledge | D. to integrate the abstract-theoretical world and the technical-practical world. |
| 5. Engineering is often defined                          | E. as making practical application of theoretical sciences.                       |

Задание 3. Грамматические задания

I. Вставьте нужную форму глагола to be или to have.

- |   |   |
|---|---|
| 1. There ... a telegram on the table.             | 6. He ... born in 1985.                       |
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| 3. There ... much snow last winter.               | 8. They ... two lectures tomorrow.            |
| 4. There ... a lot of stars and planets in space. | 9. Who ... absent today?                      |
| 5. Students ... four exams last January.          | 10. Ann doesn't ... time to go to the cinema. |

II. Образуйте сравнительную и превосходную степень от следующих прилагательных и наречий.

- |                                       |   |
|---------------------------------------|---|
| 1. big, cold, nice, bad, strong, good | 2. popular, famous, pleasant, beautiful |
|---------------------------------------|---|

III. Поставьте к следующим предложениям вопросы (общие/специальные/альтернативные/разделительные).

- |  |  |
|--|--|
| 1. There is a book on the table.   | 4. We are leaving for Moscow next week.  |
| 2. He must work hard today.  | 5. We were reading the whole evening.  |
| 3. Scientific knowledge is becoming acceptable and useful part of our lives. | 6. During the Middle Ages any attempt to develop science was cruelly suppressed by the Catholic Church |

IV. Переведите безличные предложения. Обратите внимание на их специфику.

1. It is well known that personal computers enjoy great popularity among experimenters and hobbyists.
2. It is difficult to imagine modern life with-out a computer.
3. It is quite impossible to listen to your English pronunciation: you make bad mistakes while reading.

**Контрольная работа № 2**

**Вариант I**

*Задание I. Текст по специальности.*

*I. Прочитайте текст.*



## APPLICATION OF PERSONAL COMPUTERS

Personal computers have a lot of applications, however, there are some major categories of applications home and hobby, word processor, professional, educational, small business and engineering and scientific.

Home and hobby. Personal computers enjoy great popularity among experimenters and hobbyists. They are an exciting hobby. All hobbyists need not be engineers or programmers. There are many games that use the full capabilities of a computer to provide many hours of exciting leisure-time adventure.

The list of other home and hobby applications of PCs is almost endless, including: checking account management, budgeting, personal finance, planning, investment analyses, telephone answering and dialing, home security, home environment and climate control, appliance control, calendar management, maintenance of address and mailing lists and what not.

Word processing. At home or at work, applications software, called a word processing program, enables you to correct or modify any document in any manner you wish before printing it. Using the CRT monitor as a display screen, you are able to view what you have typed to correct mistakes in spelling or grammar, add or delete sentences, move paragraphs around, and replace words. The letter or document can be stored on a diskette for future use.

Professional. The category of professional includes persons making extensive use of word processing, whose occupations are particularly suited to the desk-top use of PCs. Examples of other occupations are accountants, financial advisors, stock brokers, tax consultants, lawyers, architects, engineers, educators and all levels of managers. Applications programs that are popular with persons in these occupations include accounting, income tax preparation, statistical analysis, graphics, stock market forecasting and computer modeling. The electronic worksheet is, by far, the computer modeling program most widely used by professional. It can be used for scheduling, planning, and the examination of "what if" situations.

Educational. Personal computers are having and will continue to have a profound influence upon the classroom, affecting both the learner and the teacher. Microcomputers are making their way into classrooms to an ever-increasing extent, giving impetus to the design of programmed learning materials that can meet the demands of student and teacher.

Two important types of uses for personal computers in education are computer-managed instruction (CMI), and computer-assisted instruction (CAI). CMI software is used to assist the instructor in the management of all classroom-related activities, such as record keeping, work assignments, testing, and grading. Applications of CAI include mathematics, reading, typing, computer literacy, programming languages, and simulations of real-world situations.

### *Задание 2. Задания по тексту*

#### *I. Переведите письменно на русский язык весь текст.*

#### *II. Ответьте письменно на вопросы по тексту.*

1. What are the main spheres of PC application?
2. Do you enjoy computer games?
3. Is it necessary for a person to be an analyst or a programmer to play computer games?
4. What other home and hobby applications, except computer games, can you name?

#### *III. Найдите в тексте английские эквиваленты следующих словосочетаний:*

Много областей применения; тем не менее; обработка текстов; пользоваться популярностью; любители; способности компьютера; бесконечный перечень; анализ инвестиций; набор номера телефона; автоответчик; ведение календаря; хранение адресов и почты; и так далее; прикладные

программы; исправлять ошибки в написании; стирать предложения; переставлять абзацы; бухгалтер, биржевые брокеры; консультант по налогам; юристы; работники образования; управленцы; бухгалтерский учет; подоходный налог, компьютерное моделирование; электронные таблицы, составление расписания; оказывать огромное влияние; прокладывать путь; дать толчок, удовлетворять потребности; учебная деятельность; компьютерная грамотность; моделирование реально-жизненных ситуаций.

### Задание 3. Грамматические задания

#### I. Раскройте скобки и выберите глагол в требуемом залоге: активном или пассивном.

1. Electronic devices (help; are helped) people discover new phenomena of nature.
2. The transistor (replaced; was replaced) by vacuum tubes thanks to its numerous advantages.
3. Due to transistors all circuit functions (carried out; were carried out) inside semiconductors.
4. Electronic devices (use; are used) in scientific research.
5. Before the invention of the transistor its function (performed; was performed) by vacuum tubes.
6. The reliability of electronic systems (connect; is connected) with the number of discrete components.
7. Semiconductor integrated circuits (helped; were helped) to increase reliability of devices.
8. New types of integrated circuits (have developed; have been developed) lately.

#### II. Преобразуйте следующие предложения в Past Simple.

1. Many people have an opportunity to use computers.
2. There is no doubt that computers solve problems very quickly.
3. Instructions direct the operation of a computer.
4. Computers bring with them both economic and social changes.
5. Computing embraces not only arithmetics, but also computer literacy.
6. It is well known that computers prepare laboratory tests.
7. Those persons are computer literate and think of buying a new computer.
8. They receive a subscription magazine once a month.
9. My mother is ill and visits her doctor every other day.
10. Experts know much about how to prepare programs.

#### III. Преобразуйте следующие предложения действительного залога в страдательный по образцу: People widely use electronic devices – Electronic devices are widely used by people.

1. Electronic devices control the work of power stations.
2. They calculate the trajectories of spaceships.
3. People discover new phenomena of nature due to electronic devices.
4. Scientists designed a variety of tubes for specialized functions.
5. American scientists invented the transistor in 1948.
6. Integrated circuits greatly reduced the size of devices.
7. New types of integrated circuits increased packing density.
8. Electronics has extended man's intellectual power.
9. Scientists are looking for new ways for the improvement of integrated circuits technology.
10. Jack Kilby developed the concept of integrating device and built the first IC in 1958.

## **Контрольная работа № 2**

### **Вариант II**

#### *Задание I. Текст по специальности.*

##### I. Прочитайте текст.

WHAT IS A COMPUTER?

A computer is a machine with an intricate network of electronic circuits that operate switches or magnetize tiny metal cores. The switches, like the cores, are capable of being in one or two possible states, that is, on or off; magnetized or demagnetized. The machine is capable of storing and manipulating numbers, letters, and characters (symbols).

The basic idea of a computer is that we can make the machine do what we want by inputting signals that turn certain switches on and turn others off, or magnetize or do not magnetize the cores. The basic job of computers is processing of information. For this reason computers can be defined as devices which accept information in the form of instructions, called a program, and characters, called data, perform mathematical and / or logical operations on the information, and then supply results of these operations. The program, or part of it, which tells the computers what to do and the data, which provide the information needed to solve the problem, are kept inside the computer in a place called memory. It is considered that computers have many remarkable powers. However most computers, whether large or small, have three basic capabilities. First, computers have circuits for performing arithmetic operations, such as: addition, subtraction, division, multiplication and exponentiation. Second, computers have a means of communicating with the user. After all, if we couldn't feed information in and get results back, these machines wouldn't be of much use. Some of the most common methods of inputting information are to use terminals, diskettes, disks and magnetic tapes. The computer's input device (a disk drive or tape drive) reads the information into the computer. For outputting information two common devices used are: a printer, printing the new information on paper, and a cathode-ray-tube display, which shows the results on a TV-like screen. Third, computers have circuits which can make decisions. The kinds of decisions which computer circuits can make are not of the type: "Who would win the war between two countries?" or "Who is the richest person in the world?" Unfortunately, the computer can only decide three things, namely: Is one number less than another? Are two numbers equal? and, Is one number greater than another? A computer can solve a series of problems and make thousands of logical decisions without becoming tired. It can find the solution to a problem in a fraction of the time it takes a human being to do the job.

A computer can replace people in dull, routine tasks, but it works according to the instructions given to it. There are times when a computer seems to operate like a mechanical 'brain', but its achievements are limited by the minds of human beings. A computer cannot do anything unless a person tells it what to do and gives it the necessary information; but because electric pulses can move at the speed of light, a computer can carry out great numbers of arithmetic-logical operations almost instantaneously. A person can do the same, but in many cases that person would be dead long before the job was finished.

## *Задание 2. Задания по тексту*

### *I. Переведите письменно на русский язык весь текст.*

### *II. Ответьте письменно на вопросы по тексту.*

1. What is a computer?
2. What are the main functions of a computer?
3. What is the basic task of a computer?
4. What decisions can the computer make?

### *III. Найдите в тексте английские эквиваленты следующих словосочетаний:*

Сложная сеть электронных цепей; возможные состояния; хранить (запоминать) числа; обрабатывать символы; размагничивать сердечники; обработка информации; информация в виде команд; символы, называемые данными; выполнять математические операции; выдавать результаты; обеспечивать необходимую информацию; основные свойства; сложение, вычитание, деление,

умножение; возведение в степень; средства для общения с пользователем; устройство ввода; дисковод; считывать информацию; вывод информации; катоднолучевая трубка; выполнять тысячи логических операций; без устали; находить решение задачи; человек; в соответствии с введенной программой; вырабатывать свои суждения; возможности ограничены программой, заложенной в него человеком; дать требуемую информацию; электрические импульсы; мгновенно производить огромное количество математических операций.

### Задание 3. Грамматические задания

#### I. Раскройте скобки и выберите глагол в требуемом залоге: активном или пассивном.

1. Electronic devices (help; are helped) people discover new phenomena of nature.
2. The transistor (replaced; was replaced) by vacuum tubes thanks to its numerous advantages.
3. Due to transistors all circuit functions (carried out; were carried out) inside semiconductors.
4. Electronic devices (use; are used) in scientific research.
5. Before the invention of the transistor its function (performed; was performed) by vacuum tubes.
6. The reliability of electronic systems (connect; is connected) with the number of discrete components.
7. Semiconductor integrated circuits (helped; were helped) to increase reliability of devices.
8. New types of integrated circuits (have developed; have been developed) lately.

#### II. Преобразуйте следующие предложения в Past Simple.

1. Many people have an opportunity to use computers.
2. There is no doubt that computers solve problems very quickly.
3. Instructions direct the operation of a computer.
4. Computers bring with them both economic and social changes.
5. Computing embraces not only arithmetics, but also computer literacy.
6. It is well known that computers prepare laboratory tests.
7. Those persons are computer literate and think of buying a new computer.
8. They receive a subscription magazine once a month.
9. My mother is ill and visits her doctor every other day.
10. Experts know much about how to prepare programs.

#### III. Преобразуйте следующие предложения действительного залога в страдательный по образцу:

*People widely use electronic devices – Electronic devices are widely used by people.*

1. Electronic devices control the work of power stations.
2. They calculate the trajectories of spaceships.
3. People discover new phenomena of nature due to electronic devices.
4. Scientists designed a variety of tubes for specialized functions.
5. American scientists invented the transistor in 1948.
6. Integrated circuits greatly reduced the size of devices.
7. New types of integrated circuits increased packing density.
8. Electronics has extended man's intellectual power.
9. Scientists are looking for new ways for the improvement of integrated circuits technology.
10. Jack Kilby developed the concept of integrating device and built the first IC in 1958.

### **Контрольная работа № 3**

#### **Вариант I**

#### *Задание 1. Текст по специальности.*

I. Прочитайте текст.

Achievements of Chemical Industry

The chemical is a branch of national economy. The chemical industry began to develop in the pre-war five-year plan periods. The nitrogen, coke-chemical, aniline dye, forest chemistry, potassium and apatite branches were set up in the years of the first five-year plans; at the same time the foundation was laid for the synthetic rubber, synthetic fibre, plastics and imitation leather industries. All branches of the chemical industry constantly increase the technological possibilities of utilizing raw materials and produce new synthetic compounds from the simplest raw materials. New branches of organic synthesis have been set up on the basis of processing coals and the by - products of oil refining. Chemical processing methods have made it possible rationally to utilize industrial waste, to speed up technological processes and to ensure automation. A very important trend in the field of chemistry in the national economy is the combining of chemistry with all other branches of industry and agriculture. As a result, wide use has been made of the production waste of metallurgical and coke plants, oil refineries, etc. The chemical industry produces inexpensive, high – grade raw materials for the manufacture of consumer goods.

*Задание 2. Задания по тексту*

I. Переведите письменно на русский язык весь текст.

II. Ответьте письменно на вопросы по тексту.

1. When did the chemical industry begin?
2. Which branches of chemical industry were set in the period of first five – year plans?
3. What new branches have been set recently?
4. What is the very important trend in the field of chemistry?

III. Составьте аннотацию к данному тексту.

*Задание 3. Грамматические задания*

I. Переведите предложения на английский язык, обращая внимание на перевод модальных глаголов.

1. Он может читать и писать по-английски.
2. Она должна сделать эту работу сейчас.
3. Теперь студенты могут войти в аудиторию.
4. Она может заниматься здесь.
5. Он должен прочесть эту статью.
6. Можно мне взять ваш учебник?
7. Вы умеете говорить по-немецки?
8. Вы можете вернуть книгу завтра.

II. Переведите предложения или словосочетания, содержащие:

A. Инфинитив в функции обстоятельства

1. Computers were designed to perform thousands of computations per second.
2. To make computers more reliable transistors were used.
3. They were applied to reduce computational time.
4. To integrate large numbers of circuit elements into a small chip, transistors should be reduced in size.
5. To use integrated circuit technology new computers were built.
6. Analytical engine was invented to store data.

### *Б. Инфинитив в функции определения*

The problem to be solved; the work to be finished; the cards to be punched; calculations to be performed; the machine to be shown at the exhibition; the device to be provided with the necessary facts; computers to be used for data processing; efforts to increase reliability; electronics to connect systems and sub-systems; the speed of response to depend on the size of transistor; computers to perform thousands of calculations per second; vacuum tubes to control and amplify electric signals; these are circuits to use a large number of transistors; operations to be performed.

### III. Переведите следующие предложения. Подчеркните инфинитив и определите его форму.

1. A printer is an example of a device to produce output in a human-readable format.
2. The high-speed devices to be used as secondary storage are both input and output devices.
3. The progress of electronics to have resulted in the invention of electronic computers was a breakthrough (прорыв) of the second part of the 20<sup>th</sup> century.
4. Mendeleyev's periodic law to have been accepted as a universal law of nature is of great importance nowadays.
5. When output is available, output interfaces must be designed to reverse the process and to adopt the output to the external environment.

## **Контрольная работа № 3**

### ***Вариант II***

#### *Задание 1. Текст по специальности.*

#### **Achievements of Chemical Industry**

The chemical is a branch of national economy. The chemical industry began to develop in the pre-war five-year plan periods. The nitrogen, coke-chemical, aniline dye, forest chemistry, potassium and apatite branches were set up in the years of the first five-year plans; at the same time the foundation was laid for the synthetic rubber, synthetic fibre, plastics and imitation leather industries. All branches of the chemical industry constantly increase the technological possibilities of utilizing raw materials and produce new synthetic compounds from the simplest raw materials. New branches of organic synthesis have been set up on the basis of processing coals and the by - products of oil refining. Chemical processing methods have made it possible rationally to utilize industrial waste, to speed up technological processes and to ensure automation. A very important trend in the field of chemistry in the national economy is the combining of chemistry with all other branches of industry and agriculture. As a result, wide use has been made of the production waste of metallurgical and coke plants, oil refineries, etc. The chemical industry produces inexpensive, high – grade raw materials for the manufacture of consumer goods.

#### *Задание 2. Задания по тексту*

#### I. Переведите письменно на русский язык весь текст.

#### II. Ответьте письменно на вопросы по тексту.

1. When did the chemical industry begin?
2. Which branches of chemical industry were set in the period of first five – year plans?
3. What new branches have been set recently?
4. What is the very important trend in the field of chemistry?

#### III. Составьте аннотацию к данному тексту.

### *Задание 3. Грамматические задания*

#### *I. Переведите предложения на английский язык, обращая внимание на перевод модальных глаголов.*

1. Он может говорить по-английски.
2. Она должна прийти вовремя.
3. Теперь студенты могут войти в аудиторию.
4. Она не может заниматься здесь.
5. Он должен написать письмо.
6. Можно мне взять вашу ручку?
7. Вы умеете говорить по-немецки?
8. Вы можете вернуть книгу завтра.

#### *II. Переведите предложения или словосочетания, содержащие:*

##### *A. Инфинитив в функции обстоятельства*

1. Computers were designed to perform thousands of computations per second.
2. To make computers more reliable transistors were used.
3. They were applied to reduce computational time.
4. To integrate large numbers of circuit elements into a small chip, transistors should be reduced in size.
5. To use integrated circuit technology new computers were built.
6. Analytical engine was invented to store data.

##### *B. Инфинитив в функции определения*

The problem to be solved; the work to be finished; the cards to be punched; calculations to be performed; the machine to be shown at the exhibition; the device to be provided with the necessary facts; computers to be used for data processing; efforts to increase reliability; electronics to connect systems and sub-systems; the speed of response to depend on the size of transistor; computers to perform thousands of calculations per second; vacuum tubes to control and amplify electric signals; these are circuits to use a large number of transistors; operations to be performed.

#### *III. Переведите следующие предложения. Подчеркните инфинитив и определите его форму.*

1. A printer is an example of a device to produce output in a human-readable format.
2. The high-speed devices to be used as secondary storage are both input and output devices.
3. The progress of electronics to have resulted in the invention of electronic computers was a breakthrough (прорыв) of the second part of the 20<sup>th</sup> century.
4. Mendeleyev's periodic law to have been accepted as a universal law of nature is of great importance nowadays.
5. When output is available, output interfaces must be designed to reverse the process and to adopt the output to the external environment.

### **Контрольная работа № 4**

#### ***Вариант I***

##### *Задание I. Текст по специальности.*

##### **Fossil Fuels**

Coal, Oil and Gas are called "fossil fuels" because they have been formed from the fossilized remains of prehistoric plants and animals.

They provide around 66% of the world's electrical power, and 95% of the world's total energy demands (including heating, transport, electricity generation and other uses).

Coal is crushed to a fine dust and burnt. Oil and gas can be burnt directly. Coal provides around 28% of our energy, and oil provides 40%.

Natural gas provides around 20% of the world's consumption of energy, and as well as being burnt in power stations, is used by many people to heat their homes. It is easy to transport along pipes, and gas power stations produce comparatively little pollution.

Other fossil fuels are being investigated, such as bituminous sands and oil shale.

The difficulty is that they need expensive processing before we can use them.

The steam that has passed through the power station's turbines has to be cooled, to condense it back into water before it can be pumped round again. This is what happens in the huge "cooling towers" seen at power stations.

Some power stations are built on the coast, so they can use sea water to cool the steam instead. However, this warms the sea and can affect the environment, although the fish seem to like it.

Advantages of fossil fuels are:

1. Very large amounts of electricity can be generated in one place using coal, fairly cheaply.
2. Transporting oil and gas to the power stations is easy.
3. Gas-fired power stations are very efficient.
4. A fossil-fuelled power station can be built almost anywhere, so long as you can get large quantities of fuel to it.

Disadvantages of fossil fuels are:

1. Basically, the main drawback of fossil fuels is pollution. Burning any fossil fuel produces carbon dioxide, which contributes to the "greenhouse effect", warming the Earth.
2. Burning coal produces more carbon dioxide than burning oil or gas. It also produces sulphur dioxide, a gas that contributes to acid rain. We can reduce this before releasing the waste gases into the atmosphere.
3. Mining coal can be difficult and dangerous. Strip mining destroys large areas of the landscape.
4. Coal-fired power stations need huge amounts of fuel, which means train-loads of coal almost constantly. In order to cope with changing demands for power, the station needs reserves. This means covering a large area of countryside next to the power station with piles of coal.

Fossil fuels are not a renewable energy resource. Once we've burned them all, there isn't any more, and our consumption of fossil fuels has nearly doubled every 20 years since 1900. This is a particular problem for oil, because we also use it to make plastics and many other products.

## *Задание 2. Задания по тексту*

### *I. Переведите письменно на русский язык весь текст.*

### *II. Составьте аннотацию к данному тексту.*

## *Задание 3. Грамматические задания*

### *V. Найдите герундий и переведите предложения на русский язык:*

1. Fishing and fishing canning are important industries along the Pacific Ocean beach.
2. The Congress is responsible for making laws.
3. My illness prevented me from attending last night's concert at Lincoln Centre.

### *VI. Переведите предложения, содержащие Perfect Participle Active и Perfect Participle Passive.*

1. *Having finished* the research the scientists made the analysis of the data obtained.



2. The designer left the office *having looked* through all the documents.
3. *Having discussed* the functions of storage units we passed on to the consideration of control processing unit.
4. *Having limited* the information capacity of a single bit to two alternatives the computer designers expressed data by a combination of bits.
5. *Having translated* the program into machine language the computer architect put the program into the machine.
6. *Having been coded* the instruction was transmitted to the central processing unit.
7. *Having been transmitted* to the central processing unit the instruction made arithmetic-logical unit perform some computations.
8. *Having been regulated* by the operator the equipment operated well.

*VII. Переведите предложения, содержащие независимый причастный оборот.*

1. Data being accessed randomly, semiconductor memories are called random access memory (RAM).
2. The information capacity of a single bit being limited to two alternatives, codes are based on combination of bits.
3. Primary storage having similarity to a function of the human brain, the storage is also called memory.

*IX. Переведите сложноподчиненные предложения.*

1. It is well known in computer science that the words "computer" and "processor" are used interchangeably.
2. The operation part of the instruction is decoded so that the proper arithmetic and logic operation can be performed.
3. It is difficult to establish whether this problem can be solved at all.

**Контрольная работа № 4**

***Вариант II***

*Задание I. Текст по специальности.*

**Hydrogen and Future Energy Sources**

Fossil fuels were formed before and during the time of the dinosaurs - when plants and animals died. Their decomposed remains gradually changed over the years to form coal, oil and natural gas. Fossil fuels took millions of years to make. We are using up the fuels formed more than 65 million years ago. They can't be renewed; they can't be made again. We can save fossil fuels by conserving and finding ways to harness energy from seemingly "endless sources," like the sun and the wind.

We can't use fossil fuels forever as they are a non-renewable and finite resource. Some people suggest that we should start using hydrogen.

Hydrogen is a colorless, odorless gas that accounts for 75 percent of the entire universe's mass. Hydrogen is found on Earth only in combination with other elements such as oxygen, carbon and nitrogen. To use hydrogen, it must be separated from these other elements.

Today, hydrogen is used primarily in ammonia manufacturing, petroleum refining and synthesis of methanol. It's also used in some space program as fuel for the space shuttles, and in fuel cells that provide heat, electricity and drinking water for astronauts. Fuel cells are devices that directly convert hydrogen into electricity. In the future, hydrogen could be used to fuel vehicles and aircraft, and provide power for our homes and offices.

Hydrogen can be made from molecules called hydrocarbons by applying heat a process known as "reforming" hydrogen. This process makes hydrogen from natural gas. An electrical current can also be

used to separate water into its components of oxygen and hydrogen in a process called electrolysis. Some algae and bacteria, using sunlight as their energy source, give off hydrogen under certain conditions.

Hydrogen as a fuel is high in energy, yet a machine that burns pure hydrogen produces almost zero pollution.

Fuel cells are a promising technology for use as a source of heat and electricity in buildings, and as an electrical power source for vehicles.

Auto companies are working on building cars and trucks that use fuel cells. In a fuel cell vehicle, an electrochemical device converts hydrogen (stored on board) and oxygen from the air into electricity, to drive an electric motor and power the vehicle.

Although these applications would ideally run off pure hydrogen, in the near term they are likely to be fueled with natural gas, methanol or even gasoline. Reforming these fuels to create hydrogen will allow the use of much of our current energy infrastructure - gas stations, natural gas pipelines, etc. - while fuel cells are phased in.

In the future, hydrogen could also join electricity as an important energy carrier. An energy carrier stores, moves and delivers energy in a usable form to consumers.

## *Задание 2. Задания по тексту*

### *I. Переведите письменно на русский язык весь текст.*

### *II. Составьте аннотацию к данному тексту.*

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**Критерии оценивания контрольной работы**

Баллы III, IV семестр	Баллы V семестр	Процедура оценивания и критерии
19-20	12	Контрольные, тестовые задания выполнены полно и правильно. Возможно допущение очень незначительного количества ошибок. Правильность выполнения от 91 % и более.
15-18	10-11	Контрольные, тестовые задания в основном выполнены (выполнение от 75% и более, но менее 91%). Допущено незначительное количество ошибок (лексических, грамматических, смысловых).
10-14	8-9	Контрольные, тестовые задания выполнены не плохо, сделана основная часть (более 50% и до 75%),. Однако допущено достаточно типовых ошибок (лексических, грамматических, смысловых).
0-9	0-7	Контрольные, тестовые задания выполнены очень слабо, менее чем на половину, допущено более 50 % ошибок (лексических, грамматических, содержательных).

Министерство науки и высшего образования Российской Федерации  
 Нижнекамский химико-технологический институт (филиал)  
 федерального государственного бюджетного образовательного учреждения  
 высшего образования  
 «Казанский национальный исследовательский технологический университет»  
 (НХТИ ФГБОУ ВО «КНИТУ»)

*Подготовительный факультет  
 Кафедра иностранных языков*

По дисциплине Б1.О.08 «Иностранный язык в профессиональной сфере»  
 Направление подготовки 09.03.01 «Информатика и вычислительная техника»  
 Программа подготовки «Автоматизированные системы обработки информации и управления»  
 Квалификация (степень) выпускника БАКАЛАВР

**Экзамен**

1. Чтение и перевод оригинального текста по специальности объемом 1600 печатных знаков с иностранного языка на русский за 45 минут. Разрешается пользоваться словарем.
2. Составьте аннотацию к тексту на иностранном языке.

**Критерии оценки письменного перевода текста объёмом 1600 знаков – max 20 баллов.**

Баллы	Коммуникативные и переводческие задачи	Языковые средства
19-20	Реализованы все коммуникативные задачи. Совершены все необходимые переводческие трансформации. Перевод звучит естественно. Переводческие навыки проявлены в достаточной мере.	Связный текст, адекватное применение лексико-грамматических средств, их диапазон широк. Языковые ошибки не существенны. Адекватно переданы функционально-стилистические особенности текста. Правильно передана структура предложения с точки зрения динамического синтаксиса (тема-рема). Сочетаемость слов, характерная для переводящего языка (ПЯ), не нарушается. Значения слов в контексте правильно поняты и для них найдены удачные эквиваленты.
15-18	Коммуникативные задачи реализованы, но текст производит впечатление неестественного для переводящего языка. Не все переводческие трансформации совершены правильно. Переводческие навыки не проявлены в достаточной мере.	Достаточно связный текст, восприятие которого может быть затруднено в отдельных случаях из-за неправильно выбранного эквивалента, нарушения законов сочетаемости слов ПЯ или ошибочного понимания отдельных элементов исходного текста (ИТ). Функционально-стилистические особенности текста в основном переданы.
12-14	Реализованы не все коммуникативные задачи или часть из них реализована неадекватно. Переводческие навыки неустойчивы.	В тексте есть грубые грамматические или лексические ошибки, искажающие смысл предложений (не более 3). Структурный и лексический диапазоны заметно ограничены, связность текста нарушена. Отсутствует попытка передать функционально-стилистические особенности текста.
0-11	Коммуникативные задачи в целом не реализованы. Перевод представляет собой бессмысленный текст. Отсутствуют навыки работы со словарём (неумение	Исходный текст студентом не понят. Неправильно передана структура предложений. Большое количество грубых лексико-грамматических ошибок, нарушения сочетаемости в ПЯ. Функционально-стилистические особенности текста

	выбрать нужное по контексту слово). Переводческие навыки практически отсутствуют.	студентом не осознаются и грубо нарушаются.
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### **Критерии оценивания аннотации – max 20 баллов.**

Цель аннотации достигнута полностью. Объем аннотации логически распределен между обязательными элементами аннотации и соответствует их значимости. Грамотно написанная, логически выстроенная аннотация. Язык аннотации в целом не имеет коммуникативных ошибок, а также грубых грамматических, лексических и прочих ошибок. Лексическое оформление соответствует стилистике и нормам научного текста в целом и жанру.	16-20 баллов
Цель аннотации достигнута с некоторыми оговорками. Неоправданное выделение 1 или 2 элементов аннотации, или неоправданное уменьшение описания 1 или 2 элементов аннотации. В целом аннотация написана грамотно, нет грубых нарушений логики. Имеются незначительные ошибки. Количество коммуникативно-значимых ошибок не превышает одной. В аннотации присутствуют отдельные слова и выражения, которые не соответствуют жанру.	10-15 баллов
Цель аннотации достигнута в общих чертах. Неоправданное распределение объемов аннотации между ее элементами. В аннотации присутствуют заметные ошибки. Есть отдельные (не более 2) коммуникативные ошибки, которые не сильно нарушают логику изложения. Текст аннотации включает заметное количество стилистически нерелевантной лексики, использованы обороты и грамматические конструкции, не использующиеся в научном стиле.	6-9 баллов
Цель не достигнута, аннотация носит фрагментарный характер. Чрезмерная по объему или слишком короткая аннотация. В аннотации присутствуют коммуникативные ошибки, которые препятствуют пониманию логики изложения. Аннотация имеет выраженную смешанную стилистику. Стилистически аннотация не соответствует нормам. В аннотации преобладает разговорная или иная нерелевантная лексика в значительных количествах.	0-5 баллов