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МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
СХІДНОУКРАЇНСЬКИЙ НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ
ІМЕНІ ВОЛОДИМИРА ДАЛЯ

МЕТОДИЧНІ ВКАЗІВКИ
до практичних та самостійних занять з дисципліни
«ІНОЗЕМНА МОВА (АНГЛІЙСЬКА)»
(для здобувачів вищої освіти напряму підготовки 122 «Комп'ютерні науки»)

ЗАТВЕРДЖЕНО

на засіданні кафедри «Іноземної філології
та перекладу».

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Методичні вказівки до практичних та самостійних занять з дисципліни «Іноземна мова (англійська)» (для здобувачів вищої освіти напрямку підготовки 122 «Комп'ютерні науки») / уклад.: Н.С. Сідаш. – Київ: вид-во СНУ ім. В. Даля, 2024. – 69 с.

Методичні вказівки для практичних та самостійних занять з дисципліни «Іноземна мова (англійська)» (для здобувачів вищої освіти напрямку підготовки 122 «Комп'ютерні науки») включають в себе семестрові контрольні роботи з програмного матеріалу, який вивчається у семестрі. Контрольні роботи містять адаптовані тексти зі спеціальності, граматичні та лексичні завдання.

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Варіант контрольної роботи слід вибирати відповідно до таблиці 1. Наприклад, якщо остання цифра вашої залікової книжки «7», то знак «X» вказує на те, що потрібно вибрати варіант «3».

Таблиця 1 – Варіанти контрольної роботи

Остання цифра номера залікової книжки	Варіант				
	1	2	3	4	5
1	X				
2		X			
3			X		
4				X	
5					X
6				X	
7			X		
8		X			
9	X				
0					X

Контрольна робота №1**1 варіант**

1. Перепишіть наступні речення. Визначте за граматичними ознаками, якою частиною мови є слова, оформлені закінченням-s, і яку функцію це закінчення виконує, тобто чи служить воно: а) показником 3-ї особи однини дієслова в Present Indefinite; б) ознакою множини іменника; в) показником присвійного відмінка іменника. Перекладіть речення.

1) The most common binary codes are 8-bit codes because an 8-bit provides for 2^8 unique combinations of 1's and 0's.

2) Memory stores initial data, intermediate and final results.

3) Electronics has extended man's intellectual power.

2. Перепишіть наступні речення та перекладіть їх, звертаючи увагу на особливості перекладу означень, виражених іменником.

1) Computer system architecture is organized around the primary storage unit.

2) The two principal types of semiconductors used for memory are bipolar and metal-oxide semiconductors.

3) Magnetic tape is the oldest secondary storage medium in common use.

3. Перепишіть наступні речення, що містять ступеня порівняння прикметників і перекладіть їх.

1) Primary memory is the most expensive part of memory having the least capacity and the fastest access time.

2) The higher the speed, the smaller the capacity.

3) Data access time is much longer in electromechanical memories than in electronic ones.

4. Перепишіть і письмово перекладіть речення, звертаючи увагу на переклад неозначених і заперечувальних займенників.

1) Some floppy discs were introduced by IBM in 1972.

2) Electronic memories have no moving mechanical parts.

3) Any information performed by a computer must be interpreted into a machine code.

5. Перепишіть наступні речення, визначте в них видо-часові форми дієслів та вкажіть їх інфінітив. Перекладіть речення.

1) Magnetic disk storage has replaced magnetic tape as the main method of secondary storage.

2) Memory stores calculation program, the calculation formulae, initial data, intermediate and final results.

3) Computer is capable of handling enormous amounts of information at tremendous speeds.

6. Перепишіть наступні речення, підкресліть у кожному з них модальне дієслово або його еквівалент. Перекладіть речення.

1) Memory should produce the information needed for the computation process to all other devices of the computer.

2) It can be seen that the processes performed by a digital computer are essentially simple.

3) Neither the programmer nor the analyst could explain the cause of computer errors.

7. Прочитайте, перепишіть та письмово перекладіть текст.

Memory

It is interesting to note that memory, one of the basic components of the computer, is often called storage. It stores calculation program, the calculation formulae and initial data, intermediate and final results. Therefore, the functions of the computer memory may be classified in the following way. Firstly, the computer memory must store the information transmitted from the input and other devices. Secondly, memory should produce the information needed for the computation process all other devices of the computer.

Generally, memory consists of two main parts called the main, primary or internal, memory and the secondary or external memory. The advantage of the primary memory is an extremely high speed. The secondary memory has a comparatively low speed, but it is capable of storing far greater amount of information than the main memory. The primary storage takes a direct part in the computational process. The secondary storage provides the information necessary for a single step in the sequence of computation steps.

The most important performance characteristics of a storage unit are speed, capacity and reliability. Its speed is measured in cycle time. Its capacity is measured by the number of machine words or binary digits. Its reliability is measured by the number of failures (отказ) per unit of time.

8. Дайте відповідь на наступні питання до тексту. Питання та відповіді перекладіть.

1) What are the main parts of memory?

2) What are advantages and disadvantages of a storage unit?

3) What units are performance characteristics measured by?

1. Перепишіть наступні речення. Визначте за граматичними ознаками, якою частиною мови є слова, оформлені закінченням-s, і яку функцію це закінчення виконує, тобто чи служить воно: а) показником 3-ї особи однини дієслова в Present Indefinite; б) ознакою множини іменника; в) показником присвійного відмінка іменника. Перекладіть речення.

1) The word 'computer' refers to the central processing unit together with an internal memory.

2) CU and ALU consist of electronic circuits with millions of switches.

3) The CU controls the computation process automatically, without man's participation.

2. Перепишіть наступні речення та перекладіть їх, звертаючи увагу на особливості перекладу означень, виражених іменником.

1) It is important to note that the control unit operation is determined by an algorithm of a problem solution.

2) The product lines of major computer manufacturers such as IBM, Digital Equipment Corporation and many others are the result of the efforts of teams of computer system architects.

3) The program concerned with the third generation of computers with high-speed performance and program compatibility.

3. Перепишіть наступні речення, що містять ступеня порівняння прикметників і перекладіть їх.

1) Today there is a trend toward distributing more processing capability throughout a computer system.

2) The larger the computer, the more types of microprocessor it may use.

3) The most common binary codes are 8-bit codes because an 8-bit code provides for 2^8 , or 256 unique combinations of 1's and 0's.

4. Перепишіть і письмово перекладіть речення, звертаючи увагу на переклад неозначених і заперечувальних займенників.

1) No longer is the information processing carried out only in computer's central processing unit.

2) The basic logic element - the switch which required two separate transistors and some resistors and capacitors in the early 1950, could be packed into a single small unit in 1960.

3) A wide array of computer functions are now accessible to people with no technical background.

5. Перепишіть наступні речення, визначте в них видо-часові форми дієслів та вкажіть їх інфінітив. Перекладіть речення.

1) Since 1971 there has been a tremendous raise of work in the field of microprocessors.

2) The progress toward smaller computers is continuing.

3) The use of combination of analogue devices will continue to increase with the growth in application of microprocessors and microcomputers.

6. Перепишіть наступні речення, підкресліть у кожному з них модальне дієслово або його еквівалент. Перекладіть речення.

1) The CPU determines which operations should be carried out and in what order.

2) The CPU can be divided into two functional units namely the control unit (CU) and the arithmetic-logical unit (ALU).

3) The CU within the central processor is to transmit coordinating control signals and commands.

7. Прочитайте, перепишіть та письмово перекладіть текст.

Control unit

As it is known the two functional units of the CPU are the control unit (CU) and the arithmetic-logical unit (ALU). The control unit manages and coordinates the entire computer system. It obtains instructions from the program stored in main memory, interprets the instructions, and issues signals that cause other units of the system to execute them.

The control unit operates by reading one instruction at a time from memory and taking the action called for by each instruction. In this way it controls the flow between the main storage and the arithmetic-logical unit.

The control unit has the following components: *a counter* that selects the instructions, one at a time, from memory; *a register* that temporarily holds the instructions read from memory while it is being executed; *a decoder* that takes the coded instruction and breaks it down into individual commands necessary to carry it out; *a clock*, which produces marks at regular intervals. These timing marks are electronic and very rapid.

The sequence of control unit operations is as follows. The next instruction to be executed is read out from primary storage into the storage register. The instruction is passed from the storage register to the instruction register. Then the operation part of the instruction is decoded so that the proper arithmetic or logical operation can be performed. The address of the operand is sent from the instruction register to the address register. At last the instruction counter register provides the address register with the address of the next instruction to be executed.

8. Дайте відповідь на наступні питання до тексту. Питання та відповіді перекладіть.

1) What is the function of CU?

- 2) What role does a decoder play?
- 3) What is the sequence of CU operations?

Зваріант

1. Перепишіть наступні речення. Визначте за граматичними ознаками, якою частиною мови є слова, оформлені закінченням -s, і яку функцію це закінчення виконує, тобто чи служить воно: а) показником 3-ї особи однини дієслова в Present Indefinite; б) ознакою множини іменника; в) показником присвійного відмінка іменника. Перекладіть речення.

- 1) The CPU coordinates all the activities of the various components of the computer.
- 2) In 1960's advances in microelectronic components led to the development of microcomputer.
- 3) The CU enables the arithmetic-logical unit to perform the required operation.

2. Перепишіть наступні речення та перекладіть їх, звертаючи увагу на особливості перекладу означень, виражених іменником.

- 1) Computer-oriented data processing systems or just computer data processing systems are not designed to imitate manual systems.
- 2) In the late 60s together with the other members of the Council of Mutual Economic Assistance the Soviet Union started on the program of Unified Computer System.
- 3) A symbolism and a set of rules suitable for manipulating 'yes or no' logical propositions were developed by George Boole.

3. Перепишіть наступні речення, що містять ступеня порівняння прикметників і перекладіть їх.

- 1) Microminiaturization means that the circuits are much smaller than before; as many as 100 tiny circuits are placed now in a single chip.
- 2) The more components and interactions, the less reliable the system.
- 3) The most cost-effective computer data processing system is the one that does the job and the least cost.

4. Перепишіть і письмово перекладіть речення, звертаючи увагу на переклад неозначених і заперечувальних займенників.

- 1) There is no reason for computer experts to use computer of the first generation nowadays.
- 2) Some microprocessors are now made using complementary metal-oxide-semiconductor.
- 3) The great power of any digital computer rests in the ability to store large volumes of data and to perform these operations at extremely high speed.

5. Перепишіть наступні речення, визначте в них видо-часові форми дієслів та вкажіть їх інфінітив. Перекладіть речення.

1) Mini and microcomputers have filled a need for small but relatively flexible processing systems.

2) The designers are now working at Nano-computers and Pico-computers.

3) There appeared dozens of different microprocessors.

6. Перепишіть наступні речення, підкресліть у кожному з них модальне дієслово або його еквівалент. Перекладіть речення.

1) Programs and the data, on which the CU and the ALU operate, must be in internal memory.

2) The network can be small enough to be contained within a single laboratory, or it can spread out over a wide area.

3) In order to be acceptable by the computer instructions should be encoded into a digital form.

7. Прочитайте, перепишіть та письмово перекладіть текст.

Arithmetic-logical unit (ALU)

The arithmetic-logical unit (ALU) executes the processing operations called for by the instructions brought from main memory by the control unit. Binary arithmetic, the logical operations and some special functions are performed by the arithmetical-logical unit.

Data enter the ALU and return to main storage through the *storage register*. The *accumulator* serving as a register holds the results of processing operations. The results of arithmetic operations are returned to the accumulator for transfer to main storage through the storage register. The *comparer* performs logical comparisons of the contents of the storage register and the accumulator. Typically, the comparer tests for conditions such as "less than", "equal to", or "greater than".

So as you see the primary components of the arithmetic-logical unit are banks of bistable devices, which are called registers. Their purpose is to hold the numbers involved in the calculation and hold the results temporarily until they can be transferred to memory. At the core of the ALU is a very high-speed binary adder, which is used to carry out at least the four basic arithmetic functions (addition, subtraction, multiplication and division). The logical unit consists of electronic circuitry which compares information and makes decisions based upon the results of the comparison.

8. Дайте відповідь на наступні питання до тексту. Питання та відповіді перекладіть.

1) What is the function of the arithmetic-logical unit?

2) What operations are performed by ALU?

3) What is the function of an accumulator?

4варіант

1. Перепишіть наступні речення. Визначте за граматичними ознаками, якою частиною мови є слова, оформлені закінченням -s, і яку функцію це закінчення виконує, тобто чи служить воно: а) показником 3-ї особи однини дієслова в Present Indefinite; б) ознакою множини іменника; в) показником присвійного відмінка іменника. Перекладіть речення.

1) The computer's input device reads the information into the computer.

2) Though never built Babbage's analytical engine was the basis for designing today's computers.

3) RAM chips are the computer's primary internal working storage and require constant power to keep their bits.

2. Перепишіть наступні речення та перекладіть їх, звертаючи увагу на особливості перекладу означень, виражених іменником.

1) A remote banking terminal is an example of human-related input environment.

2) An example of human-independent input environment is a device that measures traffic flow.

3) Input-output devices can be classified as high-speed, medium-speed and low-speed.

3. Перепишіть наступні речення, що містять ступеня порівняння прикметників і перекладіть їх.

1) The higher the accuracy of the system, the less errors the system makes.

2) One of the newest types of character printers is the ink-jet printer.

3) A transistor can switch flows of electricity as fast as the vacuum tubes used in computer, but use much less power than equivalent vacuum tubes, and considerably smaller.

4. Перепишіть і письмово перекладіть речення, звертаючи увагу на переклад неозначених і заперечувальних займенників.

1) Any input interface matches the unique physical or electrical characteristics of input devices to the requirements of the computer system.

2) The input translates from our language into the pulse-no-pulse combinations understandable to the computer.

3) Logic chip is a single chip which can perform some or all the functions of a processor.

5. Перепишіть наступні речення, визначте в них видо-часові форми дієслів та вкажіть їх інфінітив. Перекладіть речення.

- 1) Electrographic techniques have developed from the paper copier technology.
- 2) Scanners provide a capability for direct data entry into the computer system.
- 3) Pencil marks made with a soft lead pencil will reflect the light.

6. Перепишіть наступні речення, підкресліть у кожному з них модальне дієслово або його еквівалент. Перекладіть речення.

- 1) The input-output environment may be human-related or human-independent.
- 2) All input devices must provide a computer with data that are transformed into the binary codes.
- 3) The data which are to be scanned may be typed or handwritten characters.

7. Прочитайте, перепишіть та письмово перекладіть текст.

Input devices

There are several devices used for inputting information into the computer: a keyboard, some coordinate input devices, such as manipulators (a mouse, a track ball), touch panels and graphical plotting tables, scanners, digital cameras, TV tuners, sound cards etc.

The mouse is an optic-mechanical input device. The mouse has three or two buttons which control the cursor movement across the screen. The mouse provides the cursor control thus simplifying user's orientation on the display. The mouse's primary functions are to help the user draw, point and select images on his computer display by moving the mouse across the screen.

In general software programs require to press one or more buttons, sometimes keeping them depressed or double-click them to issue changes in commands and to draw or to erase images. When you move the mouse across a flat surface, the ball located on the bottom side of the mouse turns two rollers. One is tracking the mouse's vertical movements; the other is tracking horizontal movements. The rotating ball glides easily, giving the user good control over the textual and graphical images.

8. Дайте відповідь на наступні питання до тексту. Питання та відповіді перекладіть.

- 1) What devices are used for inputting information into the computer?
- 2) How does the mouse operate?
- 3) What role does the ball on the bottom of the mouse play?

5 варіант

1. Перепишіть наступні речення. Визначте за граматичними ознаками, якою частиною мови є слова, оформлені закінченням -s, і яку функцію це закінчення виконує, тобто чи служить воно: а) показником 3-ї особи однини

дієслова в Present Indefinite; б) ознакою множини іменника; в) показником присвійного відмінка іменника. Перекладіть речення.

1) Speeds of chain printers range from 400 to 2400 lines per minute.

2) Page printer's rates are so high that output appears to emerge from the printer a page at a time.

3) Because of their relatively fast output rates and their ability to provide a viewer with an 'instant' output, video displays have replaced printers for many applications.

2. Перепишіть наступні речення та перекладіть їх, звертаючи увагу на особливості перекладу означень, виражених іменником.

1) A printer is an example of a device that produces output in a human-readable format.

2) A reel of magnetic tape is an example of a human-independent output.

3) Laser-beam printers use a combination of laser beam and electrophotography techniques to create printer output.

3. Перепишіть наступні речення, що містять ступеня порівняння прикметників і перекладіть їх.

1) One more advantage of microelectronics is that the smaller the device, the less power it consumes.

2) With the transistor came the possibility of building computers with much greater complexity and speed.

3) It is known that the speed of response depends on the size of transistor: the smaller the transistor, the faster it is.

4. Перепишіть і письмово перекладіть речення, звертаючи увагу на переклад неозначених і заперечувальних займенників.

1) Some devices are used for both the input and output functions.

2) The output's additional job is converting the pulse-no-pulse combinations into a form understandable to us, such as a printed report.

3) Any operation performed by a computer must be interpreted into a machine code.

5. Перепишіть наступні речення, визначте в них видо-часові форми дієслів та вкажіть їх інфінітив. Перекладіть речення.

1) We shall classify printers as character printers, line printers and page printers.

2) Nonimpact printers do not hit or impact a ribbon to print.

3) The cost per character of data stored is decreasing.

6. Перепишіть наступні речення, підкресліть у кожному з них модальне дієслово або його еквівалент. Перекладіть речення.

- 1) When output is available; output interfaces must be designed to reverse the process and to adapt the output to the internal environment.
- 2) Output may be on a printed page, which humans can read easily.
- 3) It should be noted that the high-speed devices are entirely electronic in their operation.

7. Прочитайте, перепишіть та письмово перекладіть текст.

Output devices

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 shall 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 *letter-quality 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. *Dot-matrix 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 *ink-jet 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.

8. Дайте відповідь на наступні питання до тексту. Питання та відповіді перекладіть.

- 1) What are the three types of printers?
- 2) What is a letter-quality printer?
- 3) What is a dot-matrix printer?

Контрольна робота №2

1 варіант

1. Перепишіть наступні речення, підкресліть у них присудок, визначте його видо-часову форму та стан, перекладіть речення.

- 1) Serial production of computers in Russia has been started since 1953.
- 2) Currently 64-bit development is not available in Delphi, but is being planned for a future release codenamed 'Commodore'.

3) Regularly, an instruction to the machine is expressed as a word.

2. Перепишіть і перекладіть наступні речення, звертаючи увагу на особливості перекладу дієслів у пасивному стані.

1) Von Neumann is also given a share of the credit for introducing the idea of storing both instructions and data in a binary code instead of decimal numbers or human-readable words.

2) The format and the use of the early programming languages were heavily influenced by the constants of the interface.

3) The actual coding is followed by getting the code into the memory of the computer.

3. Перепишіть наступні речення, підкресліть у них дієприкметник, визначте його функцію. Перекладіть речення.

1) Having limited the information capacity of a single bit to two alternatives the computer designers expressed data by a combination of bits.

2) While operating on the basis of analogy analogues computers simulate physical systems.

3) Powered by tiny semiconductor, chips containing computing elements with the same power and functions previously were found only in large scale computers.

4. Перепишіть і перекладіть наступні речення. Підкресліть дієприкметникові звороти.

1) An instruction having been transmitted to the instruction decoder, where it is interpreted, the control generator senses the interpretation and then produces signals.

2) Numerical quantities will be written on the code sheet in octal, they being converted from decimal to octal before being written on the code sheet.

3) In practice commercially available computers use only three, -two, or one-address formats, the latter perhaps being the most common.

5. Перепишіть і письмово перекладіть наступні речення, звертаючи увагу на емпатичні конструкції.

1) It is the flow chart that is often helpful for visualizing interrelationship between various parts of a code.

2) It is the address of a jump instruction that must be present before making a block diagram.

3) It is the specific address that can be assigned for these symbols, or names, to produce the actual code.

6. Прочитайте, перепишіть та письмово перекладіть текст.

Computer programming

Programming is the process of preparing a set of coded instructions which enables the computer to solve specific problems or to perform specific functions. The essence of computer programming is the encoding of the program for the computer by means of algorithms. The thing is that any problem is expressed in mathematical

terms; it contains formulae, equations and calculations. But the computer cannot manipulate formulae, equations and calculations. Any problem must be specially processed for the computer to understand it, that is - coded or programmed.

The phase in which the system's computer programs are written is called the development phase. The programs are lists of instructions that will be followed by the control unit of the central processing unit (CPU). The instructions of the program must be complete and in the appropriate sequence, or else the wrong answers will result. To guard against these errors in logic and to document the program's logical approach, logic plans should be developed.

7. Дайте відповідь на наступні питання до тексту. Питання та відповіді перекладіть.

- 1) What is programming?
- 2) What is the essence of programming?
- 3) What should be done with the problem before processing by the computer?

2варіант

1.Перепишіть наступні речення, підкресліть у них присудок, визначте його видо-часову форму та стан, перекладіть речення.

1)

Fourth generation computers have now arrived and integrated circuits that are being developed have been greatly reduced in size.

2) The over-all plan of the computation is diagramed by means of a so-called flow chart.

3) The instruction format is the way in which the different digits are allocated to represent specific functions.

2. Перепишіть і перекладіть наступні речення, звертаючи увагу на особливості перекладу дієслів у пасивному стані.

1) The computer is told what operations to perform by means of instructions.

2) The person who prepares systems software is referred to as a systems programmer.

3) Getting the code into the memory of the computer is followed by debugging the code.

3.Перепишіть наступні речення, підкресліть у них дієприкметник, визначте його функцію. Перекладіть речення.

1) When used voltage represents other physical quantities in analogue computers.

2) A subroutine is a subcode used many times during the computation of a program but written only once in the whole code.

3) In cases where we must write instructions involving addresses of constants having not been specially assigned, we usually use the symbolic coding.

4.Перепишіть і перекладіть наступні речення. Підкресліть дієприкметникові обороти.

- 1) An instruction having been executed, the control generator produces signals, which cause the next instruction to go from the memory to the instruction decoder.
- 2) The two octal numbers represent the instruction, each address being represented by three octal numbers.
- 3) The fraction of a floating-point number is expressed in hexadecimal digits, each consisting of four binary bits and having the values of 0-15.

5. Перепишіть і письмово перекладіть наступні речення, звертаючи увагу на емпатичні конструкції.

- 1) It is the flow chart that is almost always made before the specific instructions are written.
 - 2) It is the control program that handles interruptions and transitions between different jobs and different phases of the same job.
 - 3) It is the intermediate code in terms of symbols that is called the symbolic code.
6. Прочитайте, перепишіть та письмово перекладіть текст.

Computer programming

There are two common techniques for planning the logic of a program. The first technique is flowcharting. A flowchart is a plan in the form of a graphic or pictorial representation that uses predefined symbols to illustrate the program logic. It is, therefore, a "picture" of the logical steps to be performed by the computer. Each of the predefined symbol shapes stands for a general operation. The symbol shape communicates the nature of the general operation, and the specifics are written within the symbol. A plastic or metal guide called a template is used to make drawing the symbols easier.

The second technique for planning program logic is called pseudocode. Pseudocode is an imitation of actual program instructions. It allows a program-like structure without the burden of programming rules to follow. Pseudocode is less time-consuming for the professional programmer than is flowcharting. It also emphasizes a top-down approach to program structure.

Pseudocode has three basic structures: sequence, decision, and looping logic. With these three structures, any required logic can be expressed.

7. Дайте відповідь на наступні питання до тексту. Питання та відповіді перекладіть.

- 1) What are the main techniques for planning the program logic?
- 2) What is a flowchart?
- 3) What is a template and what is it used for?

Зваріант

1. Перепишіть наступні речення, підкресліть у них присудок, визначте його видо-часову форму та стан, перекладіть речення.

- 1) Once data have been entered correctly into the computer component of a data processing system, the need for further manipulation by human is eliminated, and the possibility of error is reduced.
- 2) The terms 'coding' and 'programming' are often used as synonyms.

3) Some bits of the instruction are set aside for the operation code designation.

2. Перепишіть і перекладіть наступні речення, звертаючи увагу на особливості перекладу дієслів у пасивному стані.

1) The first generation of electron tube computers was followed by the second generation of photo transistor computers, using magnetic logic elements.

2) The computer is told exactly which address contains an instruction and which contains a quality.

3) Debugging the code is followed by running the code on the computer and tabulating results.

3. Перепишіть наступні речення, підкресліть у них дієприкметник, визначте його функцію. Перекладіть речення.

1) Being not visible software makes possible the effective operation of computer system.

2) A program is a set of instructions composed for solving a given problem by a computer.

3) Having been regulated by the operator the equipment operated well.

4. Перепишіть і перекладіть наступні речення. Підкресліть дієприкметникові обороти.

1) A single error having been made in one instruction, the entire code is invalidated.

2) Data being accessed randomly, semiconductor memories are called random access memory (RAM).

3) Bytes locations in storage are consecutively numbered started with 0, each number being considered the address of corresponding byte.

5. Перепишіть і письмово перекладіть наступні речення, звертаючи увагу на емпфатичні конструкції.

1) It is the symbolic coding that is another intermediate aid between the statement of the problem and the final code.

2) It is the floating-point instruction set that provides for loading, comparing, storing, adding, subtracting as well as the sign control of short and long operands.

3) It is the detour from the main program through the subroutine that may occur several times during the computation of the program.

6. Прочитайте, перепишіть та письмово перекладіть текст.

Conversion of symbolic languages

As we see, most of the symbolic languages are oriented toward the particular application areas of business or science. The one problem with all symbolic languages is that none of them can be understood by a computer. The symbolic languages may say AP, ADD, or use a "plus" sign to indicate an addition step, but the only thing that means addition to a computer is its binary machine code. We have symbolic programs that are relatively easy for humans to understand, but they cannot be understood by computers. On the other hand, we have machine code that is understood by the computer, but it is difficult for humans to use. The solution is a translator that

translates the symbolic program into machine code. The translator allows the human to work with relatively easy-to-understand symbolic languages and it allows the computer to follow instructions in machine code. The translation of symbolic instructions to machine code is accomplished through the use of a program called a language processor. There are three types of language processors. They are called assemblers, compilers, and interpreters. Each translates symbolic instructions to machine code, but each does it differently.

(The translator is a program itself. It is part of a group of programs, called the operating systems that help us to use the computer.)

7. Дайте відповідь на наступні питання до тексту. Питання та відповіді перекладіть.

- 1) What is the function of the translator?
- 2) What program is used to translate symbolic instructions to machine code?
- 3) What are the main types of language processors?

4варіант

1. Перепишіть наступні речення, підкресліть у них присудок, визначте його вищо-часову форму та стан, перекладіть речення.

- 1) A command performing an addition or division has been transmitted to the central processor.
- 2) It is often best to write a code in terms of symbolic language, for the changes are easily made
- 3) The actual bits in an instruction are not written out in the binary code, some shorthand is written instead.

2. Перепишіть і перекладіть наступні речення, звертаючи увагу на особливості перекладу дієслів у пасивному стані.

- 1) Because data can be accessed randomly, semiconductor memories are referred to as random-access memory, or RAM.
- 2) The computer was given an instruction to compare the results.
- 3) Most new activity is focused around open source implementation of Common Lips, and includes the development of new portable libraries and applications.

3. Перепишіть наступні речення, підкресліть у них дієприкметник, визначте його функцію. Перекладіть речення.

- 1) Data recoded in the form of magnetized dots can be arranged to represent coded patterns of bits.
- 2) A flow chart is a diagrammatic representation of a sequence of events, usually drawn with conventional symbols representing different types of events and their interconnection.
- 3) Having been coded the instruction was transmitted to the central processing unit.

4. Перепишіть і перекладіть наступні речення. Підкресліть дієприкметникові обороти.

1) No special documents are needed for coding, the significance of each statement depending on its own format and not on its position within a fixed framework.

2) The computation of the subroutine having been completed, the computer will transfer control back to the proper address of the main program.

3) A personal computer being microprocessor-based, its central processing unit is concentrated on a single silicon chip.

5. Перепишіть і письмово перекладіть наступні речення, звертаючи увагу на емпіричні конструкції.

1) Symbolic coding does consist in writing a code not in terms of specific numerical addresses, but rather of some name description.

2) It is the process of finding and correcting errors in programs known as 'debugging' that still remains the most difficult operation.

3) It is the particular unit on which the program resides that is called the System Resident Unit.

6. Прочитайте, перепишіть та письмово перекладіть текст.

Running the computer program

The operating system is a collection of program provided by the computer's manufacturer that allows us to schedule jobs for the computer, to translate source programs into object programs, to sort data stored on secondary storage devices, and to copy data from any input device to any output device. These programs are called control programs, language programs and utility programs.

The control program (often called the supervisor, monitor, or executive) is a main-storage-resident program. Its functions are to schedule jobs, schedule input and output for our programs, and to monitor the execution of our programs. The language processors are programs that translate source programs into object programs. There are three types of language processors: assemblers, compilers, and interpreters. Each language has its own language processor.

The service programs are programs that are commonly used in all data processing centers. They have functions that are required by everyone using a computer. Examples of service programs include linkage editors to prepare object programs for execution, a librarian to catalog programs into a library area on magnetic disc, utility programs to transfer data from device to device, and sort-merge programs for sorting data on magnetic tape or disk.

7. Дайте відповідь на наступні питання до тексту. Питання та відповіді перекладіть.

1) What program is used to schedule jobs for the computer?

2) What are the examples of the service programs?

3) What are the functions of the service programs?

5 варіант

1. Перепишіть наступні речення, підкресліть у них присудок, визначте його видо-часову форму та стан, перекладіть речення.

- 1) Natural language processors have been proposed as a way to eliminate the need for a specialized language for programming.
- 2) Automatic checking of different kinds is built into the machine.
- 3) Numbers are assigned to symbols, and the final code is prepared.

2. Перепишіть і перекладіть наступні речення, звертаючи увагу на особливості перекладу дієслів у пасивному стані.

1) In 1950s assembly language programming, which had evolved to include the use of macro instruction, was followed by the development of 'third generation' programming languages.

2) Numbers are assigned to the symbols, and the final code is prepared.

3) Many new Lips programmers were inspired by writers such as Paul Graham and Eric Raymond to pursue a language other consider antiquated.

3. Перепишіть наступні речення, підкресліть у них дієприкметник, визначте його функцію. Перекладіть речення.

1) Having been coded the instruction was transmitted to the central processing unit.

2) A library of subroutines is any collection of subroutines written for general application and can be incorporated in different programs when required.

3) While dealing with discrete quantities digital computers count rather than measure.

4. Перепишіть і перекладіть наступні речення. Підкресліть дієприкметникові обороти.

1) The operation being performed, the result is formed in accumulator before it is transmitted back to memory.

2) 'A code' is more specifically a short list of instructions that direct the computer to perform only a part of the entire calculations, the term 'program' referring to the complete list of instructions used for the problem.

3) Data having been entered correctly into the computer component of a data processing system, the need for further manipulation by human is eliminated.

5. Перепишіть і письмово перекладіть наступні речення, звертаючи увагу на емоційні конструкції.

1) It is the interpreter that accepts instructions in certain standard words and translates these words into a machine language.

2) It is the compiling of a program that requires great attention of the programmer.

3) It is System Service program that is used to maintain the library: to place new programs into the library, to read the programs from the library into the memory.

6. Прочитайте, перепишіть та письмово перекладіть текст.

Testing the Computer Program

There are two kinds of errors or bugs with which programmers must deal. The first type is the coding error. Such errors are syntax errors that prevent the language

processor from successfully translating the source program to object program code. The language processor identifies the nature and the location of the error on the source program listing, so these errors are relatively easy to find and correct. The second type of bug is the logic error. The computer program can be successfully translated, but the program does not produce the desired results. These errors are generally much more difficult to find and to correct than are coding errors. Logic errors can be avoided through careful planning of the program logic, but it is the programmer's responsibility to test thoroughly all of the program's functions, in order to verify that the program performs according to specifications.

There are many tools provided to the programmer to help in debugging the program logic. These tools are called debug packages or tracing routines. They assist the programmer in following the logic by printing out calculation results and field values used in making logic decisions in the program. In a few cases it may be necessary to use a memory dump — a printout of the instructions and data held in the computer's memory — in order to find the cause of logic errors.

7. Дайте відповідь на наступні питання до тексту. Питання та відповіді перекладіть.

- 1) What are the main kinds of errors or bugs?
- 2) How can logic error be avoided?
- 3) What tools are used in debugging the program logic?

Контрольна робота №3

1 варіант

1. Перепишіть наступні речення, підкресліть у них герундій або герундіальний оборот, визначте форму і функцію герундія. Перекладіть речення.

- 1) Languages commonly arise by combining the elements of several predecessor languages with new ideas in circulation at the time.
- 2) Only careful testing can reveal the true performance issues in any system.
- 3) Is there any possibility of Delphi being downloaded from the Internet and activated with a license key?

2. Перепишіть і перекладіть наступні речення, підкресліть інфінітив або інфінітивний оборот, визначте форму і функцію інфінітиву.

- 1) Natural language processors have been proposed as a way to eliminate the need for a specialized language for programming.
- 2) One of the original goals of Delphi was to provide database connectivity to programmers as a key feature.
- 3) Java was not considered to be a pure object-oriented programming language.

3. Перепишіть і письмово перекладіть наступні речення. Зверніть увагу на те, як перекладаються умовні речення.

- 1) If human authors and speakers were ambiguous and made small errors when

using a natural language to communicate with other people, they would still expect their intent to be understood.

2) Type errors cannot be automatically detected unless a piece of code is actually executed, making debugging more difficult.

3) Garbage collection will occur at any time if a program is idle.

4. Перепишіть і перекладіть наступні речення, звертаючи увагу на те, як перекладається умовний спосіб.

1) Which input device would you use to select text and click on links on web pages?

2) It is necessary that the combination of the language definition, a program, and the program's inputs should fully specify the external behavior that occurs when the program is executed

3) The designers of the language decided to make the compiler available free of charge so that the language should become widespread.

5. Перепишіть і письмово перекладіть наступні речення, звертаючи увагу на багатофункціональність дієслів should, would.

1) The programming language name "C sharp" was inspired from musical notation where a sharp indicates that the written note should be made a half-step higher in pitch.

2) In 2006 Borland Software Corporation announced that rather than selling the development tools group it would spin it off into an independent subsidiary company named Code Gear.

3) Programmers recommended that the output of a compiler should be executed by hardware.

6. Прочитайте, перепишіть та письмово перекладіть текст.

Delphi

Code Gear Delphi, formerly known as Borland Delphi, is a software development environment for Microsoft Windows applications. It has always supported development of native Windows applications in the Delphi programming language, a further development of Object Pascal. Delphi 2009 is the twelfth and latest version released in August 2008. Delphi is mainly used for the development of desktop and enterprise database applications, but it is a general-purpose software development tool suitable for most software projects. Web applications are also possible due to the inclusion of several libraries. Delphi is distributed in various versions with different features and prices: Personal (currently not available), Professional, Enterprise (formerly Client/Server) and Architect. Delphi uses the Pascal-based Delphi programming language and compiles Delphi source code into native x86 code or managed .NET code. The latest version, Delphi 2009 (code named Tiburon), adds many new features such as completely reworking the VCL and RTL for full Unicode support.

7. Дайте відповідь на наступні питання до тексту. Питання та відповіді перекладіть.

- 1) What is formerly known as Borland Delphi?
- 2) What kinds of problems is Delphi designed for?
- 3) What versions of Delphi do you know?

8. Напишіть українсько-англійську анотацію тексту в обсязі 8-10 речень, використовуючи кліше і вирази, дані в Додатку В.

2 варіант

1. Перепишіть наступні речення, підкресліть у них герундій або герундіальний оборот, визначте його форму і функцію. Перекладіть речення.

1) Java Servlet technology provides Web developers with a simple, consistent mechanism for extending the functionality of a Web server and for accessing existing business systems.

2) Syntax highlighting is often used to aid programmers in recognizing elements of source code.

3) Linux version named Kylix was criticized as being of low quality and was abandoned after version 3.

2. Перепишіть і перекладіть наступні речення, підкресліть інфінітив або інфінітивний оборот, визначте форму і функцію інфінітиву.

1) Java byte code is instructions analogous to machine code but intended to be interpreted by a virtual machine (VM) written specifically for the host hardware.

2) One common trend in the development of programming languages has been to add more ability to solve problems using a higher level of abstraction.

3) Just as their customers pay them for Internet access, ISPs themselves seem to pay upstream ISPs for Internet access.

3. Перепишіть і письмово перекладіть наступні речення. Зверніть увагу на те, як перекладаються умовні речення.

1) If a language were used to give commands to a software application, it would be called a scripting language.

2) In runtime engine environments such as Java there exist tools that attach to the runtime engine and if exception of interest occurs they record debugging information.

3) If nearly any personal computer is capable of acting as a network server, a dedicated server will contain features making it more suitable for production environments.

4. Перепишіть перекладіть наступні речення, звертаючи увагу на те, як перекладається умовний спосіб.

1) Which input device would you use to enter drawings and sketches into a computer?

2) It is necessary that programs for a computer should be executed in a batch process without human interaction, or a user might type commands in an interactive session of an interpreter.

3) Most online shop websites are designed so that customers should follow some steps to do their virtual shopping.

5. Перепишіть і письмово перекладіть наступні речення, звертаючи увагу на багатофункціональність дієслів should, would.

1) One characteristic of Java is portability, which means that one should be able to write a program once, compile it once, and run it anywhere.

2) In 1993, CERN announced that the World Wide Web would be free to anyone.

3) He recommended that the output of a compiler should be executed by a program called an interpreter.

6. Прочитайте, перепишіть та письмово перекладіть текст.

Java

Java is a programming language originally developed by James Gosling at Sun Microsystems and released in 1995 as a core component of Sun Microsystems' Java platform. James Gosling initiated the Java language project in June 1991 for use in one of his many set-top box projects.

The language, initially called Oak and later renamed as Java, from a list of random words. Gosling aimed to implement a virtual machine and a language that had a familiar C/C++ style of notation.

So the language derives much of its syntax from C and C++ but has a simpler object model and fewer low-level facilities. Java applications are typically compiled to byte code that can run on any Java virtual machine (JVM) regardless of computer architecture.

There were five primary goals in the creation of the Java language. It should be "simple, object oriented, and familiar", "robust and secure", "architecture neutral and portable", it should execute with "high performance", be "interpreted and dynamic".

Sun made most of its Java implementations available without charge, despite their proprietary software status. Sun generated revenue from Java through the selling of licenses for specialized products such as the Java Enterprise System. It promised "Write Once, Run Anywhere" (WORA), providing no-cost run-times on popular platforms.

7. Дайте відповідь на наступні питання до тексту. Питання та відповіді перекладіть.

1) What did Gosling aimed to implement?

2) What features does Java have?

3) When did Sun Microsystems make available most of their Java technologies as free software?

8. Напишіть українсько-англійську анотацію тексту в обсязі 8-10 речень, використовуючи кліше і вирази, дані в Додатку В.

Зваріант

1. Перепишіть наступні речення, підкресліть у них герундій або герундіальний оборот, визначте його форму і функцію. Перекладіть речення.

1) Java doc provides developers with an organized system for documenting their code.

2) Some of several compilers of the Object Pascal can do things that Delphi cannot, such as supporting different operating systems, and allowing examination of the compiler source code.

3) In the arithmetic unit, multiplication and division are done by a series of adding or subtracting and shifting operations.

2. Перепишіть і перекладіть наступні речення, підкресліть інфінітив або інфінітивний оборот, визначте форму і функцію інфінітиву.

1) Once no references to an object remain, the unreachable object becomes eligible to be freed automatically by the garbage collector.

2) Web pages are known to be viewed or otherwise accessed from a range of computer-based and Internet-enabled devices of various sizes, including desktop computers, laptops and cell phones.

3) The main purpose behind a dynamic website is that it is much simpler to maintain a few web pages plus a database than to build and update hundreds or thousands of individual web pages and links.

3. Перепишіть і письмово перекладіть наступні речення. Зверніть увагу на те, як перекладаються умовні речення.

1) If a program were well-defined within a language, it might still have a meaning that was not intended by the person who wrote it.

2) Something similar to a memory leak may still occur if objects that are no longer needed are stored in containers that are still in use.

3) If you already have peripherals and software, you'll have to ensure they are compatible and can be used with the new computer.

4. Перепишіть і перекладіть наступні речення, звертаючи увагу на те, як перекладається умовний спосіб.

1) Which input device would you use to input voice commands and dictate text?

2) It is possible that an operating system should make a machine both provide services and respond quickly to the requirements of a user.

3) The specification of a programming language is intended to provide a definition so that the language users and the implementers should use it to determine whether the behavior of a program is correct.

5. Перепишіть і письмово перекладіть наступні речення, звертаючи увагу на багатофункціональність дієслів *should*, *would*.

1) One of the unique advantages of the concept of a runtime engine is that eventhe most serious errors in a Java program should not 'crash' the system under any circumstances, provided the JVM (Java Virtual Machine)itself is properly implemented.

2) Edgar Dijkstra said that the use of a formal language would prevent the introduction of meaningless constructs.

3) Although there have been attempts to design one "universal" computer language so that it should serve all purposes, all of them have failed to be generally accepted as filling this role.

6. Прочитайте, перепишіть та письмово перекладіть текст.

Python

Python was designed in the late 1980s by Guido van Rossum at CWI in the Netherlands as a successor to the ABC programming language (itself inspired by SETL). Van Rossum is Python's principal author, and his continuing central role in deciding the direction of Python is reflected in the title given to him by the Python community, Benevolent Dictator for Life (BDFL).

Python 2.0 was released on 16 October 2000, with many major new features including a full garbage collector and support for Unicode. However, the most important change was the development process itself, with a shift to a more transparent and community-backed process. Python is a general-purpose high-level programming language. Its design philosophy emphasizes code readability. Python claims to "[combine] remarkable power with very clear syntax", and its standard library is large and comprehensive. Python supports multiple programming paradigms (primarily object oriented, imperative, and functional) and features a fully dynamic type system and automatic memory management, similar to Perl, Ruby, Scheme, and Tcl. Like other dynamic languages, Python is often used as a scripting language.

7. Дайте відповідь на наступні питання до тексту. Питання та відповіді перекладіть.

1) What is Python?

2) What new features did Python 2.0 have?

8. Напишіть українсько-англійську анотацію тексту в обсязі 8-10 речень, використовуючи кліше і вирази, дані в Додатку В.

4варіант

1. Перепишіть наступні речення, підкресліть у них герундій або герундіальний оборот, визначте його форму і функцію. Перекладіть речення.

1) Programming languages may contain constructs for defining and manipulating data structures or controlling the flow of execution.

2) Initially, BASIC was concentrated on supporting straightforward mathematical work.

3) The first digital computer, the ENIAC, using 20,000 octal-base radio vacuum tubes allowed simple calculations involving 20 numbers of ten decimal digits which were held in the vacuum tube accumulators.

2. Перепишіть і перекладіть наступні речення, підкресліть інфінітив або інфінітивний оборот, визначте форму і функцію інфінітиву.

1) Servers' duties to provide service to many users over a network lead to different requirements like fast network connections and high I/O throughput.

2) James Gosling was the first to initiate the Java language project in June 1991 for the use in one of his many set-top box projects.

3) Server-oriented operating systems are considered to interact with hardware sensors to detect conditions such as overheating, processor and disk failure.

3. Перепишіть і письмово перекладіть наступні речення. Зверніть увагу на те, як перекладаються умовні речення.

1) If the program does not deallocate an object, a memory leak occurs.

2) If human authors and speakers were ambiguous and made small errors when using a natural language to communicate with other people, they would still expect their intent to be understood.

3) If you regularly search your database by surname, the index should be defined on this field.

4. Перепишіть і перекладіть наступні речення, звертаючи увагу на те, як перекладається умовний спосіб.

1) Which input device would you use to draw pictures or select menu options directly on the screen?

2) It is necessary that the machine should be instructed to perform operations on the data as the data have already been specified.

3) A programmer uses the abstractions present in the language so that the concepts involved in a computation should be represented

5. Перепишіть і письмово перекладіть наступні речення, звертаючи увагу на багатofункціональність дієслів should, would.

1) The 1960s and 1970s also saw considerable debate over the merits of structured programming, and whether programming languages should be designed to support it.

2) Software engineer said that not all syntactically correct programs would be semantically correct.

3) A dynamically-generated web page would call various bits of information from a database and put them together in a pre-defined format to present the reader with a coherent page.

6. Прочитайте, перепишіть та письмово перекладіть текст.

BASIC

In computer programming, BASIC (an acronym for Beginner's All-purpose Symbolic Instruction Code) is a family of high-level programming languages. The original BASIC was designed in 1964 by John George Kemeny and Thomas Eugene Kurtz at Dartmouth in New Hampshire, USA to provide computer access to non-science students. At the time, nearly all use of computers required writing custom software, which was something only scientists and mathematicians tended to be able to do. The language and its variants became widespread on microcomputers in the late 1970s and 1980s. BASIC remains popular to this day in a handful of highly modified dialects and new languages influenced by BASIC such as Microsoft Visual Basic. In 2006, 59% of developers for the .NET platform used Visual Basic as their only language.

Many other BASIC variants and adaptations have been written by hobbyists, equipment developers, and others, as it is a relatively simple language to develop translators for. An example of an open source interpreter, written in C, is Mini Basic.

7. Дайте відповідь на наступні питання до тексту. Питання та відповіді перекладіть.

1) What is BASIC?

2) What was BASIC designed for?

8. Напишіть українсько-англійську анотацію тексту в обсязі 8-10 речень, використовуючи кліше і вирази, дані в Додатку В.

5варіант

1. Перепишіть наступні речення, підкресліть у них герундія або герундіальний оборот, визначте його форму і функцію. Перекладіть речення.

1) The theory of computation classifies languages by the computations they are capable of expressing.

2) The designers also made BASIC available to high schools in the Dartmouth area and put a considerable amount of effort into promoting the language.

3) Computer programming (often shortened to programming or coding) is the process of writing, testing, debugging/troubleshooting, and maintaining the source code of computer programs.

2. Перепишіть і перекладіть наступні речення, підкресліть інфінітив або

інфінітивний оборот, визначте форму і функцію інфінітиву.

1) Microsoft's Internet Information Server is stated according to Net craft statistics to be the most commonly used web server software.

2) It is somewhat difficult to consider Visual Basic by Microsoft to be BASIC, because the only significant similarity to older BASIC dialects was familiar syntax.

3) John Kemeny and Thomas Kurtz were the first to initiate BASIC to provide computer access to non-science students.

3 Перепишіть і письмово перекладіть наступні речення. Зверніть увагу на те, як перекладаються умовні речення.

1) If the program attempts to access or deallocate memory that has already been deallocated, the result is undefined and difficult to predict, and the program is likely to become unstable and/or crash.

2) If you wanted to reduce the risks while buying on the Web, you would use a digital wallet as a way of holding securely credit card numbers, shipping and mailing address.

3) If you want to use the system for some time, it should be expandable, i. e. it should allow you to add on new peripherals.

4. Перепишіть і перекладіть наступні речення, звертаючи увагу на те, як перекладається умовний спосіб.

1) Which input device would you use to take and store pictures and then download them to a computer?

2) It would not be uncommon for a machine to take several minutes to start up, but it may not need restarting for months or years.

3) Although there have been attempts to design one "universal" computer language so that it should serve all purposes, all of them have failed to be generally accepted as filling this role.

5/ Перепишіть і письмово перекладіть наступні речення, звертаючи увагу на багатofункціональність дієслів should, would.

1) The execution semantics of a language defines how and when the various constructs of a language should produce a program behavior.

2) Software engineer said that ideas that originate in one language would diffuse throughout a family of related languages, and then would leap suddenly across familiar gaps to appear in an entirely different family.

3) He suggested that the technique for improving the performance of interpreted programs just-in-time compilation should be used.

5. Прочитайте, перепишіть та письмово перекладіть текст.

Lisp

Lisp (or LISP) is a family of computer programming languages with a long history and a distinctive, fully parenthesized syntax. Originally specified in 1958, Lisp is the second-oldest high-level programming language in widespread use today; only Fortran is older. Like Fortran, Lisp has changed a great deal since its early days, and a number of dialects have existed over its history. Today, the most widely known

general-purpose Lisp dialects are Common Lisp and Scheme.

Lisp was invented by John McCarthy in 1958 while he was at the Massachusetts Institute of Technology (MIT). It was originally created as a practical mathematical notation for computer programs. It quickly became the favoured programming language for artificial intelligence (AI) research. As one of the earliest programming languages, Lisp pioneered many ideas in computer science, including tree data structures, automatic storage management, dynamic typing, object-oriented programming, and the self-hosting compiler.

The name LISP derives from "LISt Processing language". Linked lists are one of Lisp languages' major data structures, and Lisp source code is itself made up of lists. As a result, Lisp programs can manipulate source code as a data structure, giving rise to the macro systems that allow programmers to create new syntax or even new domain-specific programming languages embedded in Lisp.

6. Дайте відповідь на наступні питання до тексту. Питання та відповіді перекладіть.

- 1) What is Lisp?
- 2) What was Lisp originally created for?
- 3) What innovations did it introduce?

7. Напишіть українсько-англійську анотацію тексту в обсязі 8-10 речень, використовуючи кліше і вирази, дані в Додатку В.

Контрольная работа №4

1 варіант

1. Перепишіть і перекладіть наступні слова, підкресліть суфікси, за допомогою яких вони утворені. Визначте частини мови даних слів.

Application, sophisticated, inexpensive, implement, significantly, consumer, ability, appliance, attraction, variety, available, conventional, debugging, invalidate, reemphasize, alternative, entrance, existence.

2. Перепишіть і перекладіть наступні речення, підкресліть в них інфінітив і визначте його форму і функцію.

1) Natural language processors have been proposed as a way to eliminate the need for a specialized language for programming.

2) One of the original goals of Delphi was to provide database connectivity to programmers as a key feature.

3) John McCarthy was the first to initiate Lisp in 1958 while he was at the Massachusetts Institute of Technology (MIT).

3. Перепишіть і перекладіть наступні речення. Підкресліть суб'єктний інфінітивний оборот.

1) Java was not considered to be a pure object-oriented programming language.

2) Net craft, an Internet monitoring company that is known to track Web

growth reported that there were 215.675.903 websites with domain names and content on them in 2009, compared to just 18.000 websites in August 1995.

3) Microsoft's Internet Information Server is stated according to Net craft statistics to be the most commonly used web server software.

4. Перепишіть і перекладіть наступні речення. Підкресліть об'єктний інфінітивний оборот.

1) TELNET is a program that enables a computer to function as terminal working from a remote computer and so use online databases or library catalogues.

2) Java Web Start allows Java applications to be efficiently distributed to end users across the Internet.

3) Some languages are more prone to some kinds of faults because their specification does not require compilers to perform as much checking as other languages.

5. Перепишіть і письмово переведіть текст.

The Internet

The Internet is an International computer Network made up of thousands of networks linked together. All these computers communicate with one another; they share data, resources, transfer information, etc. To do it they need to use the same language protocol: TCP/IP (Transmission Control Protocol/ Internet Protocol) and every computer is given an address or IP number. This number is a way to identify the computer in the Internet.

To use the Internet you basically need a computer, the right connection software and a modem to connect your computer to a telephone line and then access to your ISP (Internet Service Provider).

Modem converts the digital signals stored in the computer into analogue signals that can be transmitted over telephone lines. There are two basic types: external with a cable that is plugged into the computer via a USB port, and internal an expansion card inside the computer. A PC card modem is a different, more versatile option for laptops and mobile phones.

The basic equipment has changed drastically in the last few years. You no longer need a computer to use the Internet. Web TV provides email and access to the Web via a normal TV set plus a high-speed modem. More recently, Generation mobile phones and PDAs (personal digital assistants), also allow you to go online with wireless connection, without cables.

6. Дайте відповідь на питання до тексту. Питання та відповіді переведіть.

1) What do computers need to communicate with each other?

2) What do you need to use the Internet?

3) What are the basic types of modems?

7. Напишіть українсько-англійську анотацію до тексту, використовуючи схему анотування (див. Додаток В)

2 варіант

1. Перепишіть і перекладіть наступні слова, підкресліть суфікси, за допомогою яких вони утворені. Визначте частини мови даних слів.

Enable, consumer, network, wireless, requirement, connection, physical, location, webmaster, electricity, convertible, magnetism, recoding, digital, freeware, synthesize, technician, activity.

2. Перепишіть і перекладіть наступні речення, підкресліть в них інфінітив і визначте його форму і функцію.

1) Java byte code is instructions analogous to machine code but intended to be interpreted by a virtual machine (VM) written specifically for the host hardware.

2) One common trend in the development of programming languages has been to add more ability to solve problems using a higher level of abstraction.

3) It is generally possible to generate dynamic web systems and dynamic sites using a wide range of software systems, such as Java Server Pages (.JSP), the PHP and Perl programming languages. Active Server Pages (ASP), YUMA and Cold Fusion (CFM).

3. Перепишіть і перекладіть наступні речення. Підкресліть суб'єктний інфінітивний оборот.

1) Sun trademark is known to make available most of their Java technologies as free software under the GNU (General Public License).

2) Just as their customers pay them for Internet access. ISPs themselves seem to pay upstream ISPs for Internet access.

3) ISPs are certain to engage in peering, where multiple ISPs interconnect at peering points or Internet exchange points, allowing routing of data between each network.

4. Перепишіть і перекладіть наступні речення. Підкресліть об'єктний інфінітивний оборот.

1) ISPs employ a range of technologies to enable consumers to connect to their network.

2) A Virtual ISP (VISP) is an operation which purchases services from another ISP which allows the VISP's customers to access the Internet using services and infrastructure owned and operated by the wholesale ISP.

3) It is possible for an operating system to make a machine both provide services and respond quickly to the requirements of a user.

5. Перепишіть і письмово переведіть текст.

Internet service provider

An Internet service provider (ISP, also called Internet access provider, or IAP) is a company that offers its customers access to the Internet. The ISP connects to its customers using a data transmission technology appropriate for delivering Internet Protocol datagrams, such as dial-up. DSL cable modem or dedicated high-speed interconnects.

ISPs may provide Internet e-mail accounts to users which allow them to communicate with one another by sending and receiving electronic messages through their ISPs' servers. (As part of their e-mail service, ISPs usually offer the user an e-mail client software package, developed either internally or through an outside contract arrangement.) ISPs may provide other services such as remotely storing data files on behalf of their customers, as well as other services unique to each particular ISP.

ISPs employ a range of technologies to enable consumers to connect to their network.

For home users and small businesses, the most popular options include dial-up, DSL (typically Asymmetric Digital Subscriber Line ADSL), broadband wireless, cable modem and Integrated Services Digital Network (ISDN) (typically basic rate interface).

For customers with more demanding requirements, such as medium-to-large businesses, or other ISPs, Ethernet, Metro Ethernet, Gigabit Ethernet, Frame Relay, satellite Internet access and synchronous optical networking are more likely to be used.

6. Дайте відповідь на питання до тексту. Питання та відповіді переведіть.

- 1) How does an ISP provide its customers access to the Internet?
- 2) What services may ISPs provide?
- 3) What technologies does ISPs employ?

7. Напишіть українсько-англійську анотацію до тексту, використовуючи схему анотування (див. Додаток В).

3 вариант

1. Перепишіть і перекладіть наступні слова, підкресліть суфікси, за допомогою яких вони утворені. Визначте частини мови даних слів.

Software, engineer, consultant, compression, management, programmable, recoding, digital, typist, powerful, accessible, attachment, computerize, erasable, security, electronics, wireless, simulation.

2. Перепишіть і перекладіть наступні речення, підкресліть в них інфінітив і визначте його форму і функцію.

1) Once no references to an object remain, the unreachable object becomes eligible to be freed automatically by the garbage collector.

2) Visitors are not able to control what information they receive via a static website, and must instead settle for whatever content the website owner has decided to offer at that time.

3) The main purpose behind a dynamic website is that it is much simpler to maintain a few web pages plus a database than to build and update hundreds or thousands of individual web pages and links.

3. Перепишіть і перекладіть наступні речення. Підкресліть суб'єктний інфінітивний оборот.

1) In the case of e-commerce websites, the products or services are likely to be purchased at the website itself, by entering credit card or other payment information into a payment form on the site.

2) Web pages are known to be viewed or otherwise accessed from a range of computer-based and Internet-enabled devices of various sizes, including desktop computers, laptops and cell phones.

3) Very large websites, such as Yahoo!, Microsoft, and Google are considered to employ many servers and load balancing equipment to distribute visitor loads over multiple computers at multiple locations.

4. Перепишіть і перекладіть наступні речення. Підкресліть об'єктний інфінітивний оборот.

1) Microsoft Windows or Linux distributions attempt to abstract hardware, allowing a wide variety of software to work with components of the computer.

2) TELNET is a program that enables a computer to function as a terminal working from a remote computer and so use online databases or library catalogues.

3) Pascal made it easier to build dynamic and recursive data structures such as lists, trees and graphs.

5. Перепишіть і письмово переведіть текст.

Website

Website (or "web site") is a collection of related web pages, images, videos or other digital assets that are hosted on one web server, usually accessible via the Internet.

Websites are written in, or dynamically converted to, HTML (Hyper Text Markup Language) and are accessed using a software interface classified as a user agent. Web pages can be viewed or otherwise accessed from a range of computer-based and Internet-enabled devices of various sizes, including desktop computers, laptops, PDAs(persona digital assistants) and cell phones.

A website is hosted on a computer system known as a web server, also called an HTTP server, and these terms can also refer to the software that runs on these systems and that retrieves and delivers the web pages in response to requests from the website users. Apache is the most commonly used web server software (according to Net craft statistics) and Microsoft's Internet Information Server (IIS) is also commonly used.

Some websites require a subscription to access some or all of their content. Examples of subscription sites include many business sites, parts of many news sites, academic journal sites, gaming sites, message boards. Web-based e-mail, services, social networking websites, and sites providing real-time stock market data. Because they require authentication to view the content they are technically Internet sites.

6. Дайте відповідь на питання до тексту. Питання та відповіді переведіть.

1) How can a website be accessed?

2) How can web pages be viewed or accessed?

3) What are the requirements to access the website content?

7. Напишіть українсько-англійську анотацію до тексту, використовуючи схему анотування (див. Додаток В)

3 варіант

1. Перепишіть і перекладіть наступні слова, підкресліть суфікси, за допомогою яких вони утворені. Визначте частини мови даних слів.

Magnetic, recorder, accessible, information, generally, periodically, manual, software, editor, previously, server, suitable, performance, advertisement, commercial, business, security.

2. Перепишіть і перекладіть наступні речення, підкресліть в них інфінітив і визначте його форму і функцію.

1) Servers' duties to provide service to many users over a network lead to different requirements like fast network connections and high I/O throughput.

2) James Gosling was the first to initiate the Java language project in June 1991 for the use in one of his many set-top box projects.

3) The term server typically refers to a computer which may be running a server operating system, but is commonly used to refer to any software or dedicated hardware capable of providing services.

3. Перепишіть і перекладіть наступні речення. Підкресліть суб'єктний інфінітивний оборот.

1) Apache is stated according to Net craft statistics to be the most commonly used web server software.

2) Some programs are sure to wait in a sleep state for their necessity to become apparent, such as the Apache HTTP Server software.

3) Server-oriented operating systems are considered to interact with hardware sensors to detect conditions such as overheating, processor and disk failure.

4. Перепишіть і перекладіть наступні речення. Підкресліть об'єктний інфінітивний оборот.

1) Many servers take a long time for the hardware to start up and load the operating system.

2) This additional software enables the web browser to support the new content.

3) JIT (just in time) compilation and dynamic recompilation allow Java programs to approach the speed of native code without losing portability.

5. Перепишіть і письмово переведіть текст.

Server

The word server is used quite broadly in information technology. Consider the multiplatform software known as the "Apache HTTP Server". This software runs on many modern computers which may not normally be called servers (like laptops for instance), but the host computer is also a server. Specifically, the combination of the hardware computer and the Apache software can be called a web server.

In the hardware sense, the word server typically designates computer models

intended for running software applications under the heavy demand of a network environment. In this client-server configuration one or more machines, either a computer or a computer appliance, share information with each other with one acting as a host for the other.

While nearly any personal computer is capable of acting as a network server, a dedicated server will contain features making it more suitable for production environments. These features may include a faster CPU, increased high-performance RAM, and typically more than one large hard drive. More obvious distinctions include marked redundancy in power supplies, network connections, and even the servers themselves.

6. Дайте відповідь на питання до тексту. Питання та відповіді переведіть.

1) What can be called a server?

2) What does the word server mean in the hardware sense?

3) What is the difference between a dedicated server and a personal computer?

7. Напишіть українсько-англійську анотацію до тексту, використовуючи схему анотування (див. Додаток В)

5 варіант

1. Перепишіть і перекладіть наступні слова, підкресліть суфікси, за допомогою яких вони утворені. Визначте частини мови даних слів.

Server, broadly, spyware, specifically, combination, hardware, application, storage, intermediate, final, generate, quantity, development, technician, permanent, convenient.

2. Перепишіть і перекладіть наступні речення, підкресліть в них інфінітив і визначте його форму і функцію.

1) Programming languages in the batch programming era tended to be designed, like the machines on which they ran, for specific purposes.

2) It is somewhat difficult to consider Visual Basic by Microsoft to be BASIC', because the only significant similarity to older BASIC dialects was familiar syntax.

3) John Kemeny and Thomas Kurtz were the first to initiate BASIC to provide computer access to non-science students.

3. Перепишіть і перекладіть наступні речення. Підкресліть суб'єктний інфінітивний оборот.

1) Many free ISPs are known to display advertisements while the user is connected; like commercial television, in a sense they are selling the users' attention to the advertiser.

2) Microsoft's Internet Information Server is stated according to Net craft statistics to be the most commonly used web server software.

3) Modem operating systems such as Microsoft Windows or Linux distributions rightfully seem to be designed with a client-server architecture in mind.

4. Перепишіть і перекладіть наступні речення. Підкресліть об'єктивний інфінітивний оборот.

1) More recently, 3Generation mobile phones and PDAs, personal digital assistants, also allow you to go online with wireless connections, without cables.

2) The WEB enables you to post and access all sorts of interactive multimedia information and has become a real information highway.

3) Pascal made it easier to build dynamic and recursive data structures such as lists, trees and graphs.

Перепишіть і письмово переведіть текст

Local Area Networks (LANs)

Networking allows two or more computer systems to exchange information and share resources and peripherals. LANs are usually placed in the same building. They can be built with two main types of architecture: peer-to-peer, where the two computers have the same capabilities, or client-server, where one computer acts as the server containing the main hard disk and controlling the other workstations or nodes, all the devices linked in the network (e.g. printers, computers, etc.). Computers in a LAN need to use the same protocol, or standard of communication. Ethernet is one of the most common protocols for LANs. A router, a device that forwards data packets, is needed to link a LAN to another network, e.g. to the Net. Most networks are linked with cables or wires but new Wi-Fi, wireless fidelity, technologies allow the creation of WLANs, where cables or wires are replaced by radio waves.

To build a WLAN you need access points, radio-based receiver-transmitters that are connected to the wired LAN. and wireless adapters installed in your computer to link it to the network.

Hotspots are WLANs available for public use in places like airports and hotels, but sometimes the service is also available outdoors (e.g. university campuses, squares, etc.).

Wide Area Networks (WANs) have no geographical limit and may connect computers or LANs on opposite sides of the world. They are usually linked through telephone lines, fibre-optic backbones.

Wireless WANs use mobile telephone networks. The largest WAN in existence is the Internet

Дайте відповідь на питання до тексту. Питання та відповіді переведіть

What types of architecture can LANs be built?

How can LANs be linked to another network?

What do you need to build a WLAN?

7 Напишіть українсько-англійську анотацію до тексту, використовуючи схему анотування (див. Додаток В)

Контрольна робота № 5**1 варіант**

1. Translate the sentences paying attention to the Emphatic Construction

1) It was in several computer science laboratories in the United States, United Kingdom, and France where initial concepts of packet networking originated.

2) It was as early as the 1960s when the US Department of Defense awarded contracts for packet network systems, including the development of the ARPANET.

3) It was from computer science Professor Leonard Kleinrock's laboratory at University of California, Los Angeles (UCLA) to the second network node at Stanford Research Institute (SRI) where the first message was sent over the ARPANET.

2. Translate the sentences paying attention to Absolute Participial Construction

1) Increasing amounts of data are transmitted at higher and higher speeds over fiber optic networks operating at 1-Gbit/s, 10-Gbit/s, or more.

2) The Internet's takeover of the global communication landscape was almost instant in historical terms, it only communicating 1% of the information flowing through two-way telecommunications networks in the year 1993, already 51% by 2000, and more than 97% of the telecommunicated information by 2007.

3) Today the Internet continues to grow, it being driven by ever greater amounts of online information, commerce, entertainment, and social networking.

3. Translate the sentences paying attention to the Subjective Infinitive Construction.

1) Around 50% of all Wikipedia vandalism is reported to be caught by a single computer program with more than 90% accuracy.

2) The password for the computer controls of nuclear tipped missiles in the USA is known to be 00000000 for eight years.

3) Approximately 70% of virus writers are said to work under contract for organized crime syndicates.

4. Translate the following text.

Information management

Information management (IM) concerns a cycle of organizational activity: the acquisition of information from one or more sources, the custodianship and the distribution of that information to those who need it, and its ultimate disposition through

archiving or deletion.

This cycle of organizational involvement with information involves a variety of stakeholders: for example those who are responsible for assuring the quality, accessibility and utility of acquired information, those who are responsible for its safe storage and disposal, and those who need it for decision making. Stakeholders might have rights to originate, change, distribute or delete information according to organizational information management policies.

Information management embraces all the generic concepts of management, including: planning, organizing, structuring, processing, controlling, evaluation and reporting of information activities, all of which is needed in order to meet the needs of those with organizational roles or functions that depend on information.

Information management is closely related to, and overlaps with, the management of data, systems, technology, processes and – where the availability of information is critical to organizational success – strategy. This broad view of the realm of information management contrasts with the earlier, more traditional view, that the life cycle of managing information is an operational matter that requires specific procedures, organizational capabilities and standards that deal with information as a product or a service.

5. Answer the questions to the text.

- 1) What does information management (IM) concern?
- 2) What does the cycle of organizational involvement with information involve?
- 3) What does information management embrace?

6. Give English summary of the text.

2 вариант

1. Translate the sentences paying attention to the Emphatic Construction

- 1) It was in 1983, when the TCP/IP protocol invented by Robert Kahn, Vinton Cerf, and others, quickly became the most widely used network protocol in the world.
- 2) It was in 1990, when the ARPANET was retired and transferred to the NSFNET.
- 3) It was the development of electronic computers in the 1950s when the history of the Internet begins with.

2. Translate the sentences paying attention to Absolute Participial Construction

1) The first electronic computer ENIAC weighed more than 27 tons, it taking up 1800 square feet.

2) Only about 10% of the world's currency is physical money, the rest only existing on computers.

3) The ARPANET was originally created by the IPTO under the sponsorship of DARPA, it being conceived and planned by Lick Licklider, Lawrence Roberts, and others as described earlier in this section.

3. Translate the sentences paying attention to the Subjective Infinitive Construction.

1) HP, Microsoft and Apple are known to have one very interesting thing in common – they were all started in a garage.

2) An average person normally is reported to blink 20 times a minute, when using a computer he/she is known to blink only 7 times a minute.

3) The first 1GB hard disk drive was announced in 1980 to weigh about 550 pounds, and have a price tag of \$40,000.

4. Translate the following text.

History of computing hardware

Devices have been used to aid computation for thousands of years, probably initially in the form of a tally stick. The Antikythera mechanism, dating from about the beginning of the first century BC, is generally considered to be the earliest known mechanical analog computer, and the earliest known geared mechanism. Comparable geared devices did not emerge in Europe until the 16th century, and it was not until 1645 that the first mechanical calculator capable of performing the four basic arithmetical operations was developed.

Electronic computers, using either relays or valves, began to appear in the early 1940s. The electro mechanical Zuse Z3, completed in 1941, was the world's first programmable computer, and by modern standards one of the first machines that could be considered a complete computing machine. Colossus, developed during the Second World War to decrypt German messages was the first electronic digital computer. Although it was programmable, it was not general-purpose, being designed to perform only a single task. It also lacked the ability to store its program in memory; programming was carried out using plugs and switches to alter the internal wiring. The first recognizable modern electronic digital stored-program computer was the Manchester Small-Scale Experimental Machine (SSEM), which ran its first program on 21 June 1948.

The development of transistors in the late 1940s at Bell Laboratories allowed a new generation of computers to be designed with greatly reduced power consumption. The first commercially available stored-program computer, the Ferranti Mark I, con-

tained 4050 valves and had a power consumption of 25 kilowatts. By comparison the first transistorized computer, developed at the University of Manchester and operational by November 1953, consumed only 150 watts in its final version.

5. Answer the questions to the text
 - 1) What devices have been used to aid computation for thousands of years?
 - 2) What is considered to be the earliest known mechanical analog computer?
 - 3) What was the first recognizable modern electronic digital stored-program computer?

6. Give English summary of the text.

3 вариант

1. Translate the sentences paying attention to the Emphatic Construction

1) It was in early October, in 1969 when a special computer called an Interface Message Processor was developed to realize the design.

2) It was between Leonard Kleinrock's research center at the University of California at Los Angeles, and Douglas Engelbart's center at the Stanford Research Institute where the first communications were held.

3) It was the Network Control Program that was the first networking protocol used on the ARPANET.

2. Translate the sentences paying attention to Absolute Participial Construction

1) The conceptual foundation for creation of the Internet was largely created by three individuals and a research conference, each of which having changed the way we thought about technology by accurately predicting its future.

2) There are about 1 million computer viruses, 5000 new computer viruses being released every month.

3) The first microprocessor created by Intel was the 4004, it being designed for a calculator, in that time nobody imagined where it would lead.

3. Translate the sentences paying attention to the Subjective Infinitive Construction.

1) More than 80% of the emails sent daily are reported to be spams.

2) A group of 12 engineers designed IBM PC is known to be called as "The Dirty Dozen".

3) The original name of windows is known to be Interface Manager.

4. Translate the following text.

History of data storage device

Early electronic computers such as Colossus made use of punched tape, a long strip of paper on which data was represented by a series of holes, a technology now obsolete. Electronic data storage, which is used in modern computers, dates from World War II, when a form of delay line memory was developed to remove the clutter from radar signals, the first practical application of which was the mercury delay line. The first random-access digital storage device was the Williams tube, based on a standard cathode ray tube, but the information stored in it and delay line memory was volatile in that it had to be continuously refreshed, and thus was lost once power was removed. The earliest form of non-volatile computer storage was the magnetic drum, invented in 1932 and used in the Ferranti Mark 1, the world's first commercially available general-purpose electronic computer.

IBM introduced the first hard disk drive in 1956, as a component of their 305 RAMAC computer system. Most digital data today is still stored magnetically on hard disks, or optically on media such as CD-ROMs. Until 2002 most information was stored on analog devices, but that year digital storage capacity exceeded analog for the first time. As of 2007 almost 94% of the data stored worldwide was held digitally: 52% on hard disks, 28% on optical devices and 11% on digital magnetic tape. It has been estimated that the worldwide capacity to store information on electronic devices grew from less than 3 exabytes in 1986 to 295 exabytes in 2007, doubling roughly every 3 years.

5. Answer the questions to the text

- 1) What electronic computers now obsolete?
- 2) What the earliest form of non-volatile computer storage?
- 3) How did the worldwide capacity to store information on electronic devices grow from 1986 to 2007?

6. Give English summary of the text.

4 вариант

1. Translate the sentences paying attention to the Emphatic Construction

- 1) It was Norbert Wiener who invented the field of Cybernetics, inspiring future researchers to focus on the use of technology to extend human capabilities.
- 2) It was the 1956 Dartmouth Artificial Intelligence conference that crystallized the concept that technology was improving at an exponential rate, and provided the first serious consideration of the consequences.
- 3) It was Marshall McLuhan who made the idea of a global village interconnected by an electronic nervous system part of our popular culture.

2. Translate the sentences paying attention to Absolute Participial Construction

1) The industry lost about 1 percent of its employment in 2009 but regained momentum in 2010, it surpassing the employment numbers from 2008.

2) In recent years, the number of cyberattacks has increased dramatically and is expected to continue to threaten information systems, recent data pointing to a 17-fold increase in the number of cyberattacks on U.S. infrastructure between 2009 and 2011.

3) Security companies have produced reports that show large increases in cyberattacks on private businesses in 2011, antivirus programs, improved firewalls, and other intrusion detection systems being common solutions to cyberattacks.

1. Translate the sentences paying attention to the Subjective Infinitive Construction.

1) To keep IT systems running, a large workforce is reported to maintain networks, create new software, and ensure information security.

2) In addition, the proliferation of smart phones has given rise to a new “app economy,” in which new employment opportunities are reported to be available for workers who create the programs that run on mobile devices.

3) Unlike many other sectors of the economy, employment in the computer systems design and related services industry (commonly known as IT services) was announced to be not significantly affected by the recession of 2007–2009.

4. Translate the following text.

Manual data processing

Although widespread use of the term data processing dates only from the nineteen-fifties, data processing functions have been performed manually for millennia. For example, bookkeeping involves functions such as posting transactions and producing reports like the balance sheet and the cash flow statement. Completely manual methods were augmented by the application of mechanical or electronic calculators. A person whose job was to perform calculations manually or using a calculator was called a “computer.”

The 1850 United States Census schedule was the first to gather data by individual rather than household. A number of questions could be answered by making a check in the appropriate box on the form. From 1850 through 1880 the Census Bureau employed “a system of tallying, which, by reason of the increasing number of combinations of classifications required, became increasingly complex. Only a limited number of combinations could be recorded in one tally, so it was necessary to handle the

schedules 5 or 6 times, for as many independent tallies." "It took over 7 years to publish the results of the 1880 census" using manual processing methods.

5. Answer the questions to the text

- 1) How long have data processing functions been performed manually?
- 2) When did the Census Bureau employ "a system of tallying, which, by reason of the increasing number of combinations of classifications required, became increasingly complex"?
- 3) How long did it take over to publish the results of the 1880 census" using manual processing methods?

6. Give English summary of the text.

5 вариант

1. Translate the sentences paying attention to the Emphatic Construction

1) It was on August 30, 1969 when the ARPANET, and so the Internet, was born, BBN delivering the first Interface Message Processor (IMP) to Leonard Kleinrock's Network Measurements Center at UCLA.

2) It was the ARPANET that was the first wide area packet switching network, the "Eve" network of what having evolved into the Internet we know and love today.

3) It was Vannevar Bush who wrote the first visionary description of the potential uses for information technology with his description of the "memex" automated library system.

2. Translate the sentences paying attention to Absolute Participial Construction

1) Antivirus programs are often provided by third-party security firms in the computer systems design and related services industry, demand for security firms helping businesses to protect their data and intellectual property being rising.

2) Cloud computing and cybersecurity are only two areas that are expected to lead employment increases in the computer systems design and related services industry; health care IT, mobile networking, and data management contributing to employment growth over the next decade.

3) Like most industries, computer systems design and related services is made up of many different occupations, computer occupations making up more than half the industry, but a large number of managers, business and financial workers, and administrative employees work in the industry as well.

3. Translate the sentences paying attention to the Subjective Infinitive Construction.

1) The high demand for the services provided by IT industry have been announced to create a large number of fast-growing and high-paying IT jobs.

2) Establishments in computer systems design and related services are reported to provide IT expertise for consumers and firms, often consulting with businesses to help them upgrade their computer systems, networks, or software.

3) IT industry is announced to be the largest of any computer-related industry, employing more than 1.5 million people in 2011.

4. Translate the following text.

Automatic data processing

The term automatic data processing was applied to operations performed by means of unit record equipment, such as Herman Hollerith's application of punched card equipment for the 1890 United States Census. "Using Hollerith's punch card equipment, the Census Office was able to complete tabulating most of the 1890 census data in 2 to 3 years, compared with 7 to 8 years for the 1880 census. It is also estimated that using Herman Hollerith's system saved some \$5 million in processing costs" (in 1890 dollars) even with twice as many questions as during 1880.

Computerized data processing or Electronic data processing represents a later development, with a computer used instead of several independent pieces of equipment. The Census Bureau first made limited use of electronic computers for the 1950 United States Census, using a UNIVAC I system, delivered during 1952.

The term data processing has mostly been subsumed by the newer and somewhat more general term information technology (IT). The term "data processing" is presently considered sometimes to have a negative connotation, suggesting use of older technologies. As an example, during 1996 the Data Processing Management Association (DPMA) changed its name to the Association of Information Technology Professionals. Nevertheless, the terms are approximately synonymous.

5. Answer the questions to the text

- 1) What was the term automatic data processing applied to?
- 2) What does computerized data processing or Electronic data processing represent?
- 3) What has the term data processing mostly been subsumed by?

6. Give English summary of the text.

Контрольна робота № 6**1 варіант**

1. Choose the right variant and translate the sentence.

Computer engineers ...

- 1) write software and firmware for embedded microcontrollers, design VLSI chips, design analog sensors, design mixed signal circuit boards, and design operating systems.
- 2) turn raw materials into a new or updated product in the most economic, efficient, and effective way possible.
- 3) develop, design, and test software.

2. Choose the right description of the computer discipline.

Computer engineering...

- 1) is a discipline that integrates several fields of electrical engineering and computer science required to develop computer hardware and software.
- 2) deals with the study and application of electricity, electronics, and electromagnetism.
- 3) is the collection of physical components that constitute a computer system.

Computer Architecture is

- 1) designing modern microprocessors and microprocessor-based systems starting from components such as logic gates.
- 2) improving and using sophisticated automated integrated circuit and computer system design algorithms and software tools, functional validation and test of digital systems.
- 3) designing and building computer systems that monitor and control mechanical and other physical processes in real time.

3. Give the title to the following paragraph and translate it.

Do you know that according to the Bureau of Labor Statistics, the median income for computer engineering was \$108,430 in 2014, but the top-earners make more than \$160,000? Salaries vary between regions and industries. Scientific research pays a more modest wage, while computer equipment manufacturing is more lucrative.

4. Translate the following text.

Computer Engineering

Computer engineering is concerned with the design and construction of computers and computer-based systems. It involves the study of hardware, software, communications, and the interaction among them. Its curriculum focuses on the theories, principles, and practices of traditional electrical engineering and mathematics and applies them to the problems of designing computers and computer-based devices.

Computer engineering students study the design of digital hardware systems including communications systems, computers, and devices that contain computers. They study software development, focusing on software for digital devices and their interfaces with users and other devices. CE study may emphasize hardware more than software or there may be a balanced emphasis. CE has a strong engineering flavor.

Currently, a dominant area within computing engineering is embedded systems, the development of devices that have software and hardware embedded in them. For example, devices such as cell phones, digital audio players, digital video recorders, alarm systems, x-ray machines, and laser surgical tools all require integration of hardware and embedded software and all are the result of computer engineering.

5. Answer the questions to the text.

- 1) What is computer engineering?
- 2) What is it concerned with?
- 3) What does computer engineering students study?

6. Give English summary to the text.

2 вариант

1. Translate the the following paragraph and choose the right computer occupation.

Prepare lesson plans and practical exercises to instruct students in computing theories as well as the use of computer software applications. High school teachers work closely not only with students but also fellow teachers and school administrators. Employment at public schools requires studies beyond a bachelor's degree: depending on the state, teachers may need post-graduate training resulting in a license or a single subject credential to teach computer science at the secondary level.

- 1) High School Computer Science Teacher
- 2) Computer Programmer
- 3) Network and Computer Systems Administrators

2. Choose the right description of the computer discipline.

Computer science is

1) the study of the theory, experimentation, and engineering that form the basis for the design and use of computers.

2) the application of mathematics and scientific, economic, social, and practical knowledge in order to invent, innovate, design, build, maintain, research, and improve structures, machines, tools, systems, components, materials, processes, solutions, and organizations.

3) the discipline that applies the principles of engineering, physics, and materials science for the design, analysis, manufacturing, and maintenance of mechanical systems.

Computer-Aided Design is

- 1) improving and using sophisticated automated integrated circuit and computer system design algorithms and software tools, functional validation and test of digital systems
- 2) designing modern microprocessors and microprocessor-based systems starting from components such as logic gates.
- 3) designing digital hardware-software systems that encode, decode, transform, and analyze digital signals.

3. Give the title to the following paragraph and translate it.

Do you know that computer scientists are in demand and their salaries reflects this? Recent graduates in professional roles earn on average £23,144 a year. Compared to other subjects that are fairly substantial – just take a look at 'What do Graduates Earn? According to www.prospects.ac.uk, systems developers in senior management roles earn between £45,000 and £70,000 a year.

4. Translate the following text.

Computer science

Computer science spans a wide range, from its theoretical and algorithmic foundations to cutting-edge developments in robotics, computer vision, intelligent systems, bioinformatics, and other exciting areas. We can think of the work of computer scientists as falling into three categories.

They design and implement software. Computer scientists take on challenging programming jobs. They also supervise other programmers, keeping them aware of new approaches.

They devise new ways to use computers. Progress in the CS areas of networking, database, and human-computer-interface enabled the development of the World Wide Web. Now CS researchers are working with scientists from other fields to make robots become practical and intelligent aides, to use databases to create new knowledge, and to use computers to help decipher the secrets of our DNA.

They develop effective ways to solve computing problems. For example, computer scientists develop the best possible ways to store information in databases, send data over networks, and display complex images. Their theoretical background allows them to determine the best performance possible, and their study of algorithms helps them to develop new approaches that provide better performance.

Computer science spans the range from theory through programming. Curricula that reflect this breadth are sometimes criticized for failing to prepare graduates for specific jobs. While other disciplines may produce graduates with more immediately relevant job-related skills, computer science offers a comprehensive foundation that permits graduates to adapt to new technologies and new ideas.

5. Answer the questions to the text.

- 1) What is computer science?
- 2) Give carrier definition of computer scientists.
- 3) What range does computer science span?

6. Give English summary to the text.

3 вариант

1. Translate the the following paragraph and choose the right computer occupation.

Offer high-tech trouble-shooting in a range of different environments, from government agencies to industries like telecommunications and computer manufacturing, provide customer service for the public, often from call centers, or work in a company's information technology (IT) department helping other employees, focus on issues with data and communications networks.

- 1) Computer Support Specialist
- 2) Web Developer
- 3) Systems Software Developer

2. Choose the right variant and translate the sentence.

Databases are

- 1) the devices like the monitor, processor, printer and keyboard, all of which work together to accept, process, show data and information.
- 2) the programs that allow the hardware to process the data.
- 3) the gathering of associated files or tables containing related data.

Computer-Based Control Systems

- 1) designing and building computer systems that monitor and control mechanical and other physical processes in real time.
- 2) designing digital hardware-software systems that encode, decode, transform, and analyze digital signals.
- 3) analyzing and designing application-specific computers that run smartphones, medical devices, wireless sensor networks, and vehicles.

3. Give the title to the following paragraph and translate it.

Do you know that a Systems Specialist earns an average salary of \$58,666 per year? People in this job generally don't have more than 20 years' experience. The skills that increase pay for this job the most are VMware ESX and Software Installation & Upgrade. Experience has a moderate effect on income for this job.

4. Translate the following text.

Information Systems

Information systems specialists focus on integrating information technology solutions and business processes to meet the information needs of businesses and other enterprises, enabling them to achieve their objectives in an effective, efficient way. This discipline's perspective on information technology emphasizes information, and views technology as an instrument for generating, processing, and distributing information. Professionals in the discipline are primarily concerned with the information that computer systems can provide to aid an enterprise in defining and achieving its goals, and the processes that an enterprise can implement or improve using information technology. They must understand both technical and organizational factors, and they must be able to help an organization determine how information and technology-enabled business processes can provide a competitive advantage.

The information systems specialist plays a key role in determining the requirements for an organization's information systems and is active in their specification, design, and implementation. As a result, such professionals require a sound understanding of organizational principles and practices so that they can serve as an effective bridge between the technical and management communities within an organization, enabling them to work in harmony to ensure that the organization has the information and the systems it needs to support its operations. Information systems professionals are also involved in designing technology-based organizational communication and collaboration systems.

5. Answer the questions to the text

- 1) Give carrier definition of Information systems specialists?
- 2) What are they concerned with?
- 3) What skills must they have?

6. Give English summary of the text.

4 вариант

1. Translate the the following paragraph and choose the right computer occupation.

Generally find employment with computer and electronics manufacturers,

working on teams to develop new technology. The products in development include operating systems for uses ranging from computers to smartphones to cars, invent a system's interface, such as a graphical user interface that permits a human to control a computer.

- 1) Systems Software Developer
- 2) Computer Systems Analyst
- 3) Information Security Analyst

2. Choose the right variant and translate the sentence.

Software are

- 1) the programs that allow the hardware to process the data.
- 2) the gathering of associated files or tables containing related data.
- 3) the commands for combining the components above to process information and produce the preferred output.

Robotics and Vision is

- 1) designing computer systems that move through their physical environments, recognize objects and activities, and draw conclusions about their surroundings.
- 2) analyzing and designing high-performance, low-power, and reliable integrated circuits.
- 3) developing an expertise in designing software that interacts heavily with the hardware and/or environment of the system on which it runs.

3. Give the title to the following paragraph and translate it

Do you know that an Information Technology Specialist earns an average salary of \$53,555 per year? A skill in Project Management is associated with high pay for this job. Experience has a moderate effect on income for this job. Most people move on to other jobs if they have more than 20 years' experience in this career.

4. Translate the following text.

Information Technology

Information technology is a label that has two meanings. In the broadest sense, the term information technology is often used to refer to all of computing. In academia, it refers to undergraduate degree programs that prepare students to meet the computer technology needs of business, government, healthcare, schools, and other kinds of organizations. In some nations, other names are used for such degree programs.

In the previous section, we said that Information Systems focuses on the information aspects of information technology. Information Technology is the complement of that perspective: its emphasis is on the technology itself more than on the information it conveys. IT is a new and rapidly growing field that started as a grassroots response to the practical, everyday needs of business and other

organizations. Today, organizations of every kind are dependent on information technology. They need to have appropriate systems in place. These systems must work properly, be secure, and upgraded, maintained, and replaced as appropriate. Employees throughout an organization require support from IT staff which understand computer systems and their software and are committed to solving whatever computer-related problems they might have. Graduates of information technology programs address these needs.

Degree programs in information technology arose because degree programs in the other computing disciplines were not producing an adequate supply of graduates capable of handling these very real needs.

5. Answer the questions to the text
 1. What is information technology?
 2. What does it focus on?
 3. How are different organizations dependent on information technology?

6. Give English summary of the text.

5 вариант

Translate the the following paragraph and choose the right computer occupation.

In a networked world, these professionals play an important role in protecting organizations. They examine existing IT systems and propose security measures, including fixes for vulnerabilities. In industries like finance and cloud computing services, they serve as in-house staff or consultants cooperate with network administrators and computer systems analysts, and they often report directly to CTOs or IT managers. Due to the wide-ranging expertise needed, some employers opt for candidates with graduate degrees.

- 1) Information Security Analyst
- 2) Market Research Analyst
- 3) Operations Research Analyst

2. Choose the right variant and translate the sentence.

Procedures are

- 1) the commands for combining the components above to process information and produce the preferred output.
- 2) the devices like the monitor, processor, printer and keyboard, all of which work together to accept, process, show data and information.
- 3) the gathering of associated files or tables containing related data.

System Software is

- 1) developing an expertise in designing software that interacts heavily with the hardware and/or environment of the system on which it runs.
- 2) analyzing and designing high-performance, low-power, and reliable integrated circuits.
- 3) designing and building computer systems that monitor and control

mechanical and other physical processes in real time.

3. Give the title to the following paragraph and translate it

Do you know that the U.S. Bureau of Labor Statistics (BLS) projects that job for software developers will grow by 17% from 2014 to 2024, making software engineering one of the faster growing sectors in the job market? As of May 2015, developers of systems software earn a median annual income of \$105,570, while applications software developers earned a median of \$98,260 per year.

4. Translate the following text.

Software Engineering

Software engineering is the discipline of developing and maintaining software systems that behave reliably and efficiently, are affordable to develop and maintain, and satisfy all the requirements that customers have defined for them. More recently, it has evolved in response to factors such as the growing impact of large and expensive software systems in a wide range of situations and the increased importance of software in safety-critical applications.

Software engineering is different in character from other engineering disciplines due to both the intangible nature of software and the discontinuous nature of software operation. It seeks to integrate the principles of mathematics and computer science with the engineering practices developed for tangible, physical artifacts. Prospective students can expect to see software engineering presented in two contexts. Degree programs in computer science offer one or more software engineering courses as elements of the CS curriculum. Some offer a multi-course concentration in software engineering within CS.

A number of institutions offer a software engineering degree program.

Degree programs in computer science and in software engineering have many courses in common. Software engineering students learn more about software reliability and maintenance and focus more on techniques for developing and maintaining software that is correct from its inception. While CS students are likely to have heard of the importance of such techniques, the engineering knowledge and experience provided in SE programs go beyond what CS programs can provide. The importance of this fact is so great that one of the recommendations of the SE report is that, during their program of study, students of SE should participate in the development of software to be used in earnest by others. SE students learn how to assess customer needs and develop usable software that meets those needs. Knowing how to provide genuinely useful and usable software is of paramount importance.

5. Answer the questions to the text

- 1) What is software engineering?
- 2) What is the difference between computer science and in software engineering-
- 3) What do software engineering students study?

6. Give English summary of the text.

Контрольна робота 7**1 варіант**

Task No 1.

Translate the following sentences. State the functions of "it" and "that". A

1. Repeat this rule. It is very important.
2. Your solution of this task is correct. Explain it, please.
3. It was cold in the laboratory yesterday.
4. In England it rains more often than it snows.
5. What is this? It is a new computer.

B

1. It is difficult to say which month is the best.
2. It is my brother who works at this plant as an engineer.
3. It will take them plenty of time to solve the problem.
4. What is there on the wall? It is a clock.
5. It was reported that the delegation had arrived in Kyiv.

C

1. What is that? That is a text-book.
2. This is a new computer and that is an old one.
3. The price of gold is higher than that of copper.
4. I was in England last year. I liked that country very much.
5. D.I. Mendeleev was sure that the missing elements would be found.

D

1. It was in Ukraine that a large scale process of underwater welding was or-
2. The power of this engine is much greater than that one.
3. The main problem is that the experiments didn't show good results yet.
4. That it is possible to warm our houses with the energy of the sun can be demonstrated in a number of ways.
5. The mixture that was used in our experiment is highly soluble in water.

Task No 2.

Point out sentences with Subjunctive I and Subjunctive II. Translate them.

A

1. It is necessary that the engine be light and efficient.
2. The teacher demanded that we be attentive at the lesson.
3. It was necessary that we go there at once.
4. You should be more attentive at the lessons.
5. If I saw her tomorrow I should tell her about it.

B

1. If he learned Spanish she would buy him this text-book. 2. She knew something would happen today.

3. I should call on him but I have little time.
4. I should buy this book tomorrow but the shop will be closed.
5. But for the rain, we would go to football match today.

C

1. The manager suggested that she inform him about her work.
2. I should do it but I have no time.
3. He would have come to the meeting but he was busy.
4. It would be interesting to make the experiment once more.
5. She told she would go on business trip to L'viv.

D

1. I should like to take part in your experiment.
2. I said I should take this book from the library.
3. We should like to participate in this research work.
4. If I had had time I should have met her at the station.
5. I should send him this letter but I don't know his address.

Task No 3. Read, copy and translate the following text.

HOW TO WRITE A REPORT

1. Reports can serve a wide variety of purposes and so have a number of different formats. Most written reports, however, follow the same basic pattern, regardless of the subject or aim. This pattern is:

- 1) the preliminary page;
- 2) the introduction;
- 3) the body of the report;
- 4) the conclusion, recommendations or main findings;
- 5) acknowledgements;
- 6) appendix.

Before your report itself starts, you need to provide certain information, and this should be done in the preliminary pages. These pages should be:

a) The title page, which gives the title of the report, the date it was written and distributed.

b) A summary. If the report is a long one, it is a good idea to provide a brief summary (no more than 150 words), giving the gist of what the report contains, and the main conclusions, recommendations.

A table of contents. This is also only necessary if the report is a long one and should be on the page itself. In it you should list the major headings and the pages on which they appear.

In your introduction give the background to the report itself:

- why it is written;
- what it is about;
- who it is intended for;
- the investigative and other methods used.

The body of the report is the largest part. There you set out all the relevant

information — what you have discovered during your investigation, the facts on which you base your arguments, the details that you have been asked to provide. An analytical report should usually develop a logical argument, building up to a conclusion or recommendations.

The conclusion, recommendations or main findings. In an investigative or analytical report, you may discover several possible solutions to the problem you have been investigating.

Mind that there are three categories of reports, each with a slight variation of the written or spoken account of something.

Recommendation reports. As their name suggests, these are written with the aim of recommending some kinds of solution of problem raised.

Conclusion reports. A feasibility study is an example of a conclusion report. You might be asked to look into to the feasibility of a certain course of action or solution of a problem.

Information reports. These are reports which only present information making a kind of survey on the problem. You might be briefing someone or providing background information, and you would probably present your main findings but because of the nature of the report, it would contain no conclusion or recommendations.

Task No 4. Prepare IT-presentation of the report of your Research Paper.

1 вариант

Task No 1.

Translate the sentences paying attention to the meaning of "one" and "as".

A

1. I have lost my pen. I am going to buy a new one.
2. This article is more interesting than the one you gave me last time.
3. She knew that no one could help her.
4. One should always be careful when operating this machine-tool.
5. The idea of automation is one of the most important ideas for modern
rials.

B

1. Our old laboratory equipment was much worse than the new one.
2. One cannot read such technical papers without using a dictionary.
3. Due to radioactive elements one can measure the thickness of various
mate-
4. There are a great many difficult words in this text. Help me to translate some unknown ones.
5. One must know that these rays produce a harmful effect on man.

C

1. She answered all the questions as well as her comrades did.
2. As time went on one formation followed another.

3. Mars as well as Venus is a planet where no life exists. 4. Mars is 150 times as far from us as the moon.

5. The development of science and engineering makes us continue learning as long as we live.

D

1. As they were making experiments they came across an interesting phenomenon.

2. As soon as the experiment is done we shall write down the results.

3. Such instruments as thermometers and barometers are widely used in any physical laboratories.

4. For industrial purposes salt is generally taken as mined.

5. As a result of the research work much interesting material has been collected.

Task No 2.

Point out sentences with Conditional Mood. Translate them. A

1. I should have got this book yesterday but the library was closed. 2. If I had met him I should have told him about it.

3. But for the late hour I should stay with you longer.

4. It's a pity I have no time. We should play chess then.

5. I was told the delegation would arrive at 11 o'clock.

B

1. She would write him letter but she doesn't know his address.

2. I should translate this text but I have no dictionary.

4. They would have come to see us but they were busy. I hoped that I should find him at the laboratory.

5. Yesterday I should have done the same.

C

1. If I were you I wouldn't do such a thing.

2. If you had said this I would never-have come to you. 3. It would be desirable to make such experiment.

4. I shall put down your address lest I should forget it.

5. I was sure that I should arrive in the morning.

D

1. She said that she would try to come to the lecture in time. 2. You should have made this research long before.

3. We were sure that we should be able to reach the town before dark. 4. It would be interesting to know if he has finished his experiment.

5. If the train had been late, they wouldn't have managed to arrive to our conference in time.

Task No 3. Read, copy and translate the following text. SOME USEFUL

ADVICE TO A SPEAKER

1. Before you begin writing your paper think about two things: your purpose and your audience.
2. Regardless of your topic you should take into consideration the audience's background and the range of their knowledge in this particular field.
3. Don't try to cover too wide a field in your talk: one main idea consistently and methodically developed will ensure the understanding and appreciation of the audience. Arrange your arguments so as to support this main idea.
4. There are two ways of delivering your speech: talking or reading. If you decided on the first way, a previously prepared outline or notes on the cards will be good guides during your presentation. They will help you to keep the order of points and not forget something important. You may also write down your speech word for word but don't try to learn it by heart. Instead, practice delivering the information the speech contains in parts. After that go over the entire speech until you can speak freely.
5. If you read the text, make the rhythm and pace of your talk closer to those of natural speech. To keep up contact with the audience don't forget to look up regularly.
6. Emphasize the most important points, changing the tone and rate of your speech and making deliberate pauses. This will help you to hold the attention of the audience.
7. You ought to remember that your listeners don't have the opportunity to come back to what has been already said. They can't stop at a puzzling idea and think it over. For this reason, don't neglect repetition, specifications, internal summaries, etc.
8. If your speech exceeds the time allowed, don't be tempted to speed up your delivery. Think over in advance which parts of the text can be left out.
9. You are to talk to the audience as if you were talking to a group of your very good friends. Make your listeners feel that you are talking to each other individually.

Task No 4. Prepare IT-presentation of the report of your Research Paper.

2 вариант

Task No 1.

Translate the following sentences from English. A

- 1.Science changes the conditions of man's life. 2.Climate changes slowly. Climate changes are slow.
- 3.The steel manufacture has been considerably increased in our country.
- 4.They manufacture high quality goods at this plant.
- 5.The word "building" is a concrete noun.

B

- 1.Concrete units have been brought to the site. 2.Concrete is widely used in construction.
- 3.There were large crowds of people in the streets. 4.People quickly crowd

round the street accidents.

5.He didn't much damage his motor-car in the street accident.

C

1.Storms sometimes cause great damage. 2.Place your text-books on the table.

3. They hoped to get the first place in horse race.

4. I like to watch clouds of different shapes in the blue sky. 5.He shapes a piece of clay into a ball.

D

1.Our teacher has made some valuable remarks. 2.He remarked that it was getting cold.

3.We heard strange steps outside. 4.The steps were made of marble.

5.5. An old man always steps heavily.

Task No 2.

Point out sentences with the Suppositional Mood. Translate the sentences. A

1. The doctor suggested that the girl should stay in the open air as long as possible.

2. It is necessary that the students should rewrite the test.

3. They suggested that the plan of the experiment should be discussed at once.

4. It is desirable that you should bring the text book to the lesson. 5.My scientific adviser insisted that we should meet in two days.

B

1.It is important that all should be present at the conference. 2.We demand that everything should be explained to us.

3. They told that the plan would be discussed tomorrow.

4. It is important that this new device should be used for our experiment.

5.He demanded that they should discuss this problem at once.

C

1. It is desirable that he be here at 10 o'clock. 2.It is desirable that she be there at five o'clock.

3. It was necessary that they should take measures immediately.

4. The CEO ordered that the goods should be sent in two days.

5. The manager suggested that the terms of delivery should be discussed at the next meeting.

D

1. The teacher closed the window lest the students should catch cold. 2.1 insist that you should consult a doctor.

3. It is required that the data received during the experiment should be highly accurate.

4. The new device must be thoroughly tested so that we might (should) use

it in our research.

5. You should be more careful while crossing the street.

Task No 3. Read, copy and translate the following text.

ACADEMIC CONFERENCES

Conferences are usually composed of various presentations. They tend to be short and concise, with a time span of about 10 to 30 minutes; presentations are usually followed by a discussion. The work may be bundled in written form as academic papers and published as the conference proceedings. Usually a conference will include keynote speakers (often, scholars of some standing, but sometimes individuals from outside academia). The keynote lecture is often longer, lasting sometimes up to an hour and a half, particularly if there are several keynote speakers on a panel.

In addition to presentations, conferences also feature panel discussions, round tables on various issues and workshops.

Prospective presenters are usually asked to submit a short abstract of their presentation, which will be reviewed before the presentation is accepted for the meeting. Some disciplines require presenters to submit a paper of about 6–15 pages, which is peer reviewed by members of the program committee or referees chosen by them.

In some disciplines, such as English and other languages, it is common for presenters to read from a prepared script. In other disciplines such as the sciences, presenters usually base their talk around a visual presentation that displays key figures and research results.

A large meeting will usually be called a conference, while a smaller is termed a workshop. They might be single track or multiple track, where the former has only one session at a time, while a multiple track meeting has several parallel sessions with speakers in separate rooms speaking at the same time.

At some conferences, social or entertainment activities such as tours and receptions can be part of the program. Business meetings for learned societies or interest groups can also be part of the conference activities.

The larger the conference, the more likely it is that academic publishing houses may set up displays. Large conferences also may have a career and job search and interview activities.

Academic conferences fall into three categories:

- the themed conference, small conferences organized around a particular topic;
- the general conference, a conference with a wider focus, with sessions on a wide variety of topics. These conferences are often organized by regional, national, or international learned societies, and held annually or on some other regular basis.
- the professional conference, large conferences not limited to academics but with academically related issues.

Task No 4. Prepare IT-presentation of the report of your Research Paper.

Task No 1.

Translate the following sentences from English. A

1. Mass is the quantity of matter in a special specimen.
 2. It is a matter of common observation that matter exists in three states.
 3. As a matter of fact this discovery is not new.
 4. No matter what results we get we shall continue our research.
- It doesn't matter when he comes, we shall begin our experiment without him.

B

1. Many complicated problems have been solved by means of computers.
2. In mechanics, force does not mean strength.
3. This means that all elements have the same properties.
4. The Greek word "physic" means "nature".
5. At present Internet is the best means of communication.

C

1. At present we are making a very important experiment.
2. Her present work is very interesting, she likes it very much.
3. When his experimental work was ready he presented it to his professor.
4. The Present Indefinite Tense was explained at the last lesson.
5. Who was not present at the lecture yesterday?

D

1. Since the atomic structure became known, many chemical and physical processes were understood.
2. Since ancient times people studied natural phenomena.
3. Since the results were bad we repeated our experiment once more.
4. Much has been changed in the development of atomic energy since 1960.
5. It is a long time since I saw him last.

Task No 2.

Define the types of Conditional Sentences. Translate them. A

1. If I had known that Barbara was ill, I should have come to see her.
2. If the weather is fine tomorrow, we shall go for a walk.
3. I'll give you this book on condition that you return it next week.
4. He won't finish his experiment in time unless he works hard.
5. If you were young now, you would certainly become a good sportsman.

B

1. If the plane had been late, they wouldn't have arrived in Kyiv in time.
2. If he comes, I shall ask him to wait.
3. If he should come, I shall ask him to wait.
4. If I had time, I always went to the theatre.
5. If you see my friend, ask him to ring me up.

C

1. If she is here, she is probably working in the library.
2. If he called on them yesterday, they gave him all necessary information.
3. If my supervisor had time now, he would help me.
4. If we received the documents tomorrow, we should start loading the goods the day after tomorrow.
5. If I saw my manager tomorrow, I should ask him about terms of payment.

D

1. If you study hard, you will know your subject well. 2. If you studied hard, you would know your subject well.
3. We would resolve some of our problems if we had better experimental techniques.
4. If I had been informed about the symposium at least a week before it started, I could have attended it.
5. We might have done most of the work by now, if we had not failed with our last experiment.

Task No 3. Read, copy and translate the following text.

SCIENTIFIC CONFERENCES

If you are a real scientist you should take a great interest in scientific conferences. A conference gives you a chance to express your ideas and to take into consideration the other concepts. Each conference is held on a *d e f i n i t e* problem sometimes under somebody's sponsorship. The primary objective of the conference is to encourage scientists and to present their latest findings and discuss their problems. The discussion makes it possible to raise the problem, to clear it up or to obtain better understanding of it. To carry on the discussion a round table discussion is usually organized.

So if you are interested in scientific research and have received an invitation to the conference be sure to take part in it. The first thing to do is to think about the subject of the gathering. Don't forget to reply to the Organizing Committee in the earliest possible way and to submit the abstracts of your report before the deadline indicated in the invitation.

If the conference is far away from the place where you live, remember about the accommodation to stay. Sometimes the Organizing Committee gives you the campus living accommodations otherwise you should think of it yourself. The accommodation services are not granted but as a rule are paid by the participants.

Now try to imagine that the day of conference has come. After the registration of all participants the plenary session begins. A person from the Organizing Committee is usually opening and charring the conference. After the introductory lecture you will have the opportunity to listen to the invited lectures given by famous scientists. This is a great chance to study and find the solution to the problems you might be interested in.

Then you start working in sections. Each section has it's own specific subject for discussion and is held in the form of round table discussion where everybody is able to express his scientific point of view. On the last day of conference a final session takes place. This is the time to sum up the result of the discussions and debates. Very often the banquets are given and that may be the last step of the conference. So, don't miss a

chance to meet new interesting people, to discuss the most urgent scientific problems and to find new solutions for your future research.

Task No 4. Prepare IT-presentation of the report of your Research Paper.

4 вариант

Task No 1.

Translate the following sentences from English. A

1. Can you say if this ship calls at London.
2. His name is Edward, but everybody calls him Ned. 3. What is this thing called?
4. I called on Mr. Brown at his office. 5. Why don't the students come when I call?

B

1. I am sorry I was out when you called.
2. I'll call for you at 10 o'clock and we shall go to the library. 3. She is in the next room. Call her immediately.
4. What do we call the people who live in Spain? 5. There is no call for you to worry today. C 1. He called at your house but you were not in. 2. Many young men feel the call of the sea.
3. She feels ill today, please call her a doctor. 4. Call me at 7 o'clock tomorrow morning, please.
5. The doctor is not at home, he was called away to an accident.

D

1. Your plan will call for a lot of money and time. 2. This occasion calls for quick actions.
3. These pictures call up scenes from my childhood. 4. The game was called off.
5. We decided to call a meeting on Friday.

Task No 2.

Point out sentences with: 1) the Indicative Mood; 2) the Subjunctive Mood; the Imperative Mood. Translate the sentences.

A

1. My friend speaks both English and French fluently. 2. It is necessary that he be here in time.
3. Why didn't you answer to my telephone call? 4. Let us go to the laboratory.
5. It would be useful to translate this article.

B

1. She spoke as if she had seen it with her own eyes.
2. I shall give him this letter when he comes back.
3. I should go to the cinema, if you didn't mind.

4. Help them, please.
5. We are translating a very difficult text now.

C

1. She was working at her English at that time.
2. He would have come to you, if you had rung him up.
3. You would write the test well if you learnt this grammar rule.
4. They will be playing chess all morning.
5. Let us analyze this experiment.

D

1. You have not told me everything about that problem.
2. Let the students take part in this research work.
3. We had not received the telegram when she arrived.
4. Had she come earlier, she would have found her supervisor here.
5. She has been teaching English at our University since 2005.

Task No 3. Read, copy and translate the following text.

THE RESEARCH PAPER

The general aim of research is to answer questions by giving fair consideration to the best available evidence. Research may be conducted in a laboratory, by a field investigation, or in many other ways; but the research for a freshman paper is usually confined to printed material, either collected in a source-book or waiting to be discovered in the scientific library. The job may be broken down into the following five steps: (a) finding a good question; (b) locating the best printed evidence on this question; (c) considering this evidence until you reach a reasonable conclusion; (d) organizing your findings; (e) presenting these findings in such a way that a reader can easily check their accuracy and completeness.

A good many students concentrate too much and too early on the fifth step. The mechanics of a paper—physical organization, footnotes, bibliography, and so forth—are certainly important, and will be explained in this lecture at some length. But these things are only means to an end. If you understand how and why they work you should be able to get them straight and use them reasonably and accurately. If you don't you may well blunder along, trying to get two footnotes on a page (whether it needs ten or none), oppressed by a sense of futility and feeling extremely vague about what you are trying to do. We shall therefore examine the general principles of research writing first, and then try to show how sound mechanics fit in with these principles. For instance,

Step One: Finding a Good Question. There are at least three requirements for a good question: It should interest you. It will take you a good many hours to write a respectable paper, and there is no use being bored when you might be finding out something that you want to know. It should lead to a fairly definite answer. If you ask "Is jazz better than classical music?" you can wander around indefinitely, and you may develop an interesting essay; but you'll never have a satisfactory paper. You would do much better to ask (a) "What are the technical contributions of jazz?" or (b) "What proportion of music critics now consider jazz a serious and important form of music?" It should be limited enough to be handled adequately within the assigned length.

Task No 4. Prepare IT-presentation of the report of your Research Paper.

Міністерство освіти і науки України
Східноукраїнський національний університет ім. В. Даля

Англійська мова

Контрольна робота № ____

Варіант № ____

Виконав _____

Група _____

Залікова книжка № _____

Дата _____

Підпис _____

Викладач _____

20__р.

(Зразок оформлення другої сторінки контрольної роботи)

English Test – Paper № _____

Variant _____

Group _____

Student _____

Анотування тексту
Кліше та вирази

1. The text under review is taken from . . .
Даний текст узятий з . . .
2. The title of the reviewed text is . . .
Назва даного тексту . . .
3. (Judging from the title,) The subject of the text is . . .
(Судячи п назві.). Тема тексту . . .
4. The text begins with a discussion of (a description of) . . .
Текст починається з обговорення (опису) . . .
5. Of great importance is the fact that . . .
Велику важливість представляє той факт, що . . .
6. Then the text provides the reader with some information on . . .
Потім в тексті повідомляється читачеві інформація про . . .
7. In conclusion the author presents some results of . . . (a discussion of, some materialson) . . .
У висновку автор представляє результати (обговорення, матеріали)...
8. The text is addressed to undergraduates (students) of economical departments (those studying the problem of ..)
Текст адресований студентам економічних факультетів (тим, хто займається проблемою). . .
9. The text is illustrated with tables (diagrams, figures, photographs) . . .
Текст ілюстрований таблицями (діаграмами, малюнками, фотографіями)...
10. Summing up, I'd like to note that
Підводячи підсумки, мені б хотілося зауважити, що ...

МЕТОДИЧНІ ВКАЗІВКИ

до практичних та самостійних занять з дисципліни

«ІНОЗЕМНА МОВА (АНГЛІЙСЬКА)»

(для здобувачів освітнього рівня «бакалавр» спеціальності

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Укладач:
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