

Міністерство освіти і науки України
ОДЕСЬКИЙ НАЦІОНАЛЬНИЙ ПОЛІТЕХНІЧНИЙ УНІВЕРСИТЕТ

**МЕТОДИЧНІ ВКАЗІВКИ
ДО ВИКОНАННЯ КОНТРОЛЬНИХ
ЗАВДАНЬ № 2, 3
З АНГЛІЙСЬКОЇ МОВИ
для студентів 1-го курсу
заочної форми навчання**

Одеса
Наука і техніка
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Затверджено
на засіданні кафедри
іноземних мов
Протокол № 3 від 27.10.07

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Методичні вказівки і контрольні завдання № 2, 3 з англійської мови для студентів 1-го курсу заочної форми навчання / Укл. О.В. Лебедєва, Г.П. Мікешова, М.Г. Томенко, Л.Ю. Цапенко – Одеса: “Наука і техніка”, 2007. – 37с.

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ПЕРЕДМОВА

Основною метою навчання студентів англійській мові в технічному вузі є досягнення ними практичного володіння цією мовою, що в умовах заочного навчання означає формування вміння самостійно читати іноземні літературні джерела за своїм фахом з метою здобуття інформації. Ця програма передбачає головним чином самостійну роботу студентів.

Методичні вказівки містять тексти з вправами. Цей матеріал повинен допомогти навчити працювати з текстами самостійно і може також використовуватись на заняттях викладачем.

Лексичні та граматичні вправи дають найбільш типові випадки вживання мовного матеріалу тексту. Щоб зрозуміти наукову літературу, треба оволодіти визначеним запасом слів та висловів.

За повний курс навчання студент повинен мати словниковий запас у 500 загальнонавчаних слів, який є основою для розширення потенціального словникового запасу до 1000-1500 лексичних одиниць.

У процесі навчання необхідно засвоїти основні граматичні явища та структури, характерні для наукових текстів англійською мовою, які подані у вказівках. Кількість вправ, які входять до контрольних завдань, допоможуть досягнути мети.

Студент першого року навчання має виконати 3 контрольних роботи. Кожну письмову роботу необхідно виконувати в окремому зошиті. У разі одержання незадовільної рецензії на роботу, бажана додаткова консультація з викладачем.

У процесі підготовки до заліку студент повинен підготувати 5 с. англійського тексту самостійно (1 с. дорівнює 1500 друкованих знаків).

КОНТРОЛЬНЕ ЗАВДАННЯ № 2

Для правильного виконання цього завдання необхідно опрацювати розділи курсу англійської мови за рекомендованими підручниками і методичними вказівками чи посібниками.

1. Питальна, заперечна, спонукальна форми дієслова. Види заперечення.

2. Умовні підрядні речення (Типи англійських підрядних речень. Умови і особливості їхнього перекладу на українську мову. Багатозначність сполучників "if і "whether". Безсполучникові умовні речення).

3. Дієприкметник, форми і функції дієприкметника в реченні. Залежний і незалежний дієприкметникові звороти.

4. Герундій. Значення і способи його перекладу.

5. Герундій з прийменниками в функції обставин.

Варіант 1

I. Перепишіть і перекладіть речення, позначте тип речення.

1. If I had noticed this mistake earlier, I could have corrected it myself.

2. You should submit your test paper timely.

3. He asked if he could be provided with the necessary materials.

4. A worker never breaks his machinery provided he is careful enough.

5. If you observed all the rules of operating the machine, you would increase its productivity.

6. I'd like to get acquainted with the rules of operating this equipment.

II. Перепишіть речення; підкресліть в них дієслово-присудок (у стверджувальній, питальній, заперечній чи спонукальній формах); перекладіть українською або російською мовою.

1. Before beginning the experiment get acquainted with the safety rules.

2. One should not begin the experiment without getting acquainted with the safety rules.

3. Have you got acquainted with the safety rules before beginning the experiment?

4. Anyone who has not got acquainted with safety rules cannot be permitted to take part in this experiment.

5. What data does the system of reactor process monitoring supply the operator with? (reactor process monitoring - технологический контроль ядерного реактора).

6. Now let us get acquainted with the principles of biological shielding (защита) of the reactor.

III. Перекладіть речення, звернувши увагу на форму вираження заперечення.

1. Neither of these materials can withstand such temperatures.

2. Neither this nor that material could be used in your experiment.

3. He did not say anything, as he had no objections.

4. No dictionary can help you to translate the text if you don't know grammar.

5. Nothing could be done to prevent unwanted extra-heating of the condensate (конденсат).

6. None of them were present at the last conference.

IV. Розподіліть наведені нижче неособові форми дієслова на три групи:

a) як такі, що мають пасивний стан;

b) означають дію, яка передує (передування) дії дієслова - присудка;

c) означають дію, одночасну з дією дієслова - присудка.

Зважте, що кожна форма групи "а" обов'язково повинна також входити в одну

із таких двох груп.

changing; having changed; being changed; having been changed; having performed; performing; having been performed; being performed; being used; using; having been used; having used; having been compared; comparing; being compared; having compared.

V. Перекладіть речення, що містять "ing" . Зазначте в дужках у кінці речення, чи є дана "ing" форма герундієм, чи дієприкметником.

1. Now the computer is processing information on your problem.
2. The main function of a computer is processing information.
3. A processor is a unit processing input information.
4. In processing information you should use a computer.
5. Using an electronic computer you can considerably accelerate your investigation.
6. Using a computer will permit you to increase the speed of calculations.

VI. Перекладіть речення, звертаючи увагу на особливості перекладу прийменників у сполученні з герундієм.

1. In processing information you can use personal computers of the institute computing center.
2. On completing the experiments one should thoroughly analyse the results obtained.
3. By repeating the experiment you could use some additional data.
4. It would be impossible to get these data without using special extremely sensitive transducers (датчики).
5. In describing most physical processes one can use mathematical equations.
6. Without changing pressure you cannot change the boiling point of this mixture.

VII. Виберіть потрібну форму дієприкметника з наведених в дужках. Перекладіть одержані речення.

1. The problem (solving; being solved; having solved) by the operator is connected with the conversion of human language into machine language.
2. A typical output device may be an electric typewriter (activated; activating; having activated) by the electric impulses (supplying; supplied; having supplied) by machine.
3. (Having been introduced; Being introduced; Having introduced) these new methods of materials handling they hoped to increase labour productivity.
4. These are two kinds of numbers (containing; contained) in addresses: permanent or constant numbers and temporary numbers.
5. The control program is a large program (occupied; occupying; having occupied) thousands of bytes.
6. The data (being obtained; having been obtained; having obtained) are of great interest for our work.

VIII. Перекладіть речення, звертаючи увагу на обставинні словосполучення з дієприкметниками.

1. When proved experimentally, the new concept became universally adopted.
2. This material cannot be processed unless specially prepared.
3. When solving a problem you must take into consideration some facts mentioned before.
4. If applied to production process, automation enables workers to operate several machine-tools simultaneously.

IX. Перекладіть речення; підкресліть у них дієприкметникові звороти; обведіть кружком номери речень, які містять незалежний дієприкметниковий зворот.

1. The operations being analysed in this chapter are connected with data processing.
2. Having been divided into equal portions, the data were fed into the memory of the computer.
3. The machine operates 24 hours per day, part of time being spent on checking.
4. The problem being too complicated, the students could not solve it at once.
5. Having thoroughly studied the contemporary theories of electricity A.S.Popov succeeded in constructing an apparatus to transmit electromagnetic waves at a distance.
6. The speed of waves being known, it is enough to measure the time, which elapses between the transmission of signals, and the arrival of reflected waves in order to locate the object, which caused the reflection.

X. Перепишіть і усно перекладіть текст. Перекладіть письмово 1,3,4,6-й абзаци.

Robots: New Sensors Promise More Flexibility

1. The use of industrial robots has increased rapidly during the last two decades. However, most of the jobs performed by robots have remained simple, repeatable, and monotonous tasks, such as loading and unloading, spot and arc welding, spray painting, etc. One of the main reasons for this is that most robots today have little or no sensory capabilities. They can function only in environments where the objects to be manipulated are precisely located in the proper position for the robot to grasp, paint, weld, or whatever else. Thus, the robot needs no sensor capability to find where to place the weld. It welds at the same place each time whether or not there is anything to weld.

2. In this article we will discuss the current state of the art in robot sensor technology, specifically vision and tactile sensors, and look at the ways of processing, integrating and using sensor data more effectively in the control of robots.

3. Some of the most dramatic recent improvements in sensors for robots have been in the field of vision. Now robots can see in two dimensions. Vision systems enable robots to recognize objects as long as the objects contrast sharply with their background and do not touch or overlap each other.

4. These systems typically use luminance images derived from TV-like cameras. A luminance image is a two-dimensional array of numbers, each of which corresponds to the brightness of the point in the scene being imaged. The primary use of such systems has been limited to inspection applications where parts are precisely presented to the vision system, and lighting is carefully controlled.

5. The main problem with two-dimensional vision is that the three-dimensionality of the scene is lost during the process of acquiring an image.

6. Robots, of course, function in a three-dimensional world. Depth information is critical for enabling a robot to avoid collisions with objects in its environment while it is moving, picking up discrete parts and performing other operations. Thus, three-dimensional vision is the key to enabling robots to function reliably and safely in an unstructured environment.

XI. Передивіться ще раз 2-й і 5-й абзаци і дайте відповідь на такі запитання.

1. What problem is this article devoted to?
2. What part do robot sensors play in the control of robots?
3. What happens during the process of acquiring an image with two-dimensional vision?

Знайдіть в тексті англійські еквіваленти іменників. Укажіть дієслова того ж кореня.

Модель: допомога - help → допомагати - to help

- | | |
|--------------------------|--------------------|
| 1) користь | - - - |
| 2) використання | -.....-.....-..... |
| 3) положення,
позиція | -.....-.....-..... |
| 4) обробка | -.....-.....-..... |
| 5) покращення | -.....-.....-..... |
| 6) застосування | -.....-.....-..... |
| 7) зварка | -.....-.....-..... |

Варіант 2

I. Перепишіть і перекладіть речення, позначте тип речення. Перекладіть українською або російською мовою.

1. He asked me if I had read the instruction carefully.
2. If she practiced more she could get good results.
3. The ship would have run aground if the pilot had made a mistake.
4. I would not buy things on the installment system (в рассрочку) if I were you.
5. Unless they leave a lamp beside that hole in the road somebody will fall into it.
6. I could repair the device myself if I had a long ladder.

II. Перепишіть речення; підкресліть в них дієслово-присудок (у стверджувальній, питальній, заперечній чи спонукальній формах); перекладіть українською або російською мовою.

1. One of the most important uses of resistance is its ability to make electricity produce heat.
2. The hydroelectric station to be constructed on this river will start working in three years.
3. What does the peripheral equipment of the computer consist of?
4. One could answer this question by testing different alternatives.
5. If you pulled the emergency stop valve (стоп-кран) the train would stop and you would be fined.
6. Let him show these documents only after the materials arrive.

III. Перекладіть речення, звернувши увагу на форму вираження заперечення.

1. I could remember neither the name of the author nor the title of the book.
2. They did not have the right to begin loading before the 15th September.
3. Nobody told her to type this contract in three copies.
4. No agreement has been signed by the representative of this firm.
5. None of us like to be reminded several times of the same things.

There is no chance of getting the new information about their experiment.

IV. Розподіліть наведені нижче неособові форми дієслова на три групи:

a) як такі, що мають пасивний стан;

b) означають дію, яка передуює (передування) дії дієслова — присудка;
означає дію, одночасну з дією дієслова — присудка.

having been obtained; obtaining; being obtained; having obtained; being determined; determining; having been determined; having determined; making; having made; being made; having been made; having analysed; analysing; having been analysed; being analysed.

V. Перекладіть такі речення, що містять "ing" . Зазначте в дужках у кінці речення, чи є дана "ing" форма герундієм чи дієприкметником.

1. The electric current passing through a wire will heat that wire.
2. All electrons are considered to be carrying negative charge of electricity.
3. An ammeter is an instrument for measuring current.
4. In spite of all difficulties our laboratory succeeded in using this method of research.

5. The rules of operating this machine are very simple.

6. My friends succeeded in creating a new instrument for measuring purpose.

VI. Перекладіть речення, звертаючи увагу на особливості перекладу прийменників у сполученні з герундієм.

1. In passing through the metal, electrons must of course collide with many ions.
2. On studying the nature of that new phenomenon, they were not satisfied with the results obtained.

3. Upon receiving the orders he communicated them to the chief of the plant.

4. They insist on your answering them immediately.

5. After walking for three hours we stopped to let the others catch up with us.

6. Without receiving exact results one cannot repeat the experiment.

VII. Виберіть потрібну форму дієприкметника з наведених у дужках. Перекладіть одержані речення.

1. The data (obtained, obtaining, having been obtained) are in good conformity with the previous results.

2. The space (having surrounded, surrounding, surrounded) a magnet is called its magnetic field.

3. ... (placing, having placed, placed) a magnetic material in the field of another magnet, we can magnetize it to a certain degree.

4. Her books (having read, read, reading) by people all over the world are still immensely popular.

5. When (using, having used) a laser, the antenna system can be reduced to only a few inches.

6. Experiments (conducting, having conducted, conducted) recently have shown that the laser can be used for welding.

VIII. Перекладіть речення, звертаючи увагу на обставинні словосполучення з дієприкметниками.

1. We discussed a simple experiment speaking of induction.

2. When reading the article the engineers made notes for their coming experiment.

3. These papers cannot be used unless specially prepared.

4. While constructing the device the engineer introduced some improvements.

5. Studying various phenomena of nature, Newton discovered the law of gravitation.

6. Being referred to in many works the periodic law of elements proved its validity

IX. Перекладіть речення; підкресліть в них дієприкметникові звороти; обведіть кружком номери речень, які містять незалежний дієприкметниковий зворот.

1. The new hypothesis accepted, scientists began to apply it to their investigations.

2. The scientist having developed the new technology, the plant introduced it.

3. Having investigated the new substance the scientist made a very important conclusion.

4. Computers making calculations fast, engineers use them widely.

5. The current generated flows through the circuit.

6. There being no fuel in the tank, the motor stopped.

X. Перепишіть і усно перекладіть текст. Перекладіть письмово 1-й і 3-й абзаци.

COSMIC RAYS

1. It may be true to say that all radiation is emitted from single atoms of matter, but we cannot be sure of this, since we find that everywhere accessible to us there is a small amount of a very penetrating radiation known as cosmic rays, the origin of which is unknown. They are believed to exist throughout the universe. It is difficult to be sure of their fundamental nature because, when they enter the Earth, they are apt to release particles from atoms.

2. The primary cosmic rays are protons, the nuclei of atoms of helium and other elements, moving in interstellar space with huge energies. The intensity of the cosmic rays is almost completely independent of the time of the day. This means that they bombard the earth from all sides. If the particles move in a straight line, this would mean that cosmic radiation is isotropic everywhere in space. If they do not, we would be forced to assume that the sources of cosmic rays surround the solar system symmetrically on all sides.

3. The energy density of cosmic rays at the earth roughly equals that of the light of stars and is thousand of times greater than the density of light energy in intergalactic space. If cosmic rays are actually distributed uniformly in space, their total energy is thousand of times greater than the energy of starlight in the same huge volume. Since light and cosmic rays are propagated almost with the same velocity, this means that thousands of times more energy is given off in the form of cosmic rays than light. At the present time there is no known energy source thousand of times more powerful which could act in intergalactic space.

Notes:

1) interstellar space - міжпланетний простір;

2) starlight — світло зірок;

3) energy source - джерело енергії;

4) to believe — думати, уважати.

XI. Передивіться ще раз 2-й абзац і дайте відповідь на запитання.

1. What are the primary cosmic rays?

2. Does the intensity of the cosmic rays depend on the time of the day?

3. Do cosmic rays bombard the earth from one side?

XII. Знайдіть в тексті англійські еквіваленти іменників. Укажіть дієслова того ж кореня.

Модель: допомога - help —> допомогати - to help

1) походження, джерело -

2) напруга, інтенсивність -

3) випромінювання -

4) кількість -

5) форма -

6) простір, проміжок -

7) система -

Варіант 3

I. Перепишіть і перекладіть речення, позначте тип речення. Перекладіть українською або російською мовою.

1. We should not solve this problem if we had no plastics with some unique properties.

2. He asked them, if they had applied a digital computer in solving the problem.

3. If I were a designer of cars I should think of more extensive application of plastics

for finishes (обробка).

4. If he is an excellent specialist we shall ask his advice.
5. If I were acquainted with this famous professor I should ring him up.
6. You will be free tomorrow if you finish this work in time.

II. Перепишіть речення; підкресліть в них дієслово-присудок (у стверджувальній, питальній, заперечній чи спонукальній формах); перекладіть українською або російською мовою.

1. The demands for engineers greatly increase in the age of rapid scientific progress.
2. The materials mentioned above cannot be used in industry.
3. How is a program in FORTRAN structured?
4. Our laboratory assistant is to prepare all the equipment for our experiments.
5. Let us suppose that you are standing in the station watching a passing - by freight

train.

6. There are two main means of producing small electric currents for special purpose.

III. Перекладіть речення, звернувши увагу на форму вираження заперечення.

1. In case there is no current in a conductor there can be no electric field within it.
2. Neither copper nor aluminum must be used in this case.
3. Energy can neither be created nor destroyed.
4. Nobody has seen the necessary materials for such experiments.
5. No transistors were used for performing complicated operations.

IV. Розподіліть наведені нижче неособові форми дієслова на три групи:

- a) як такі, що мають пасивний стан;
- b) означають дію, яка передує (передування) дії дієслова — присудка;
- c) означає дію, одночасну з дією дієслова — присудка.

Being given, giving, having been used; having given; having been developed, developing, being developed; solving, having solved, being solved, having been solved, having lifted; lifting; having been lifted, being lifted.

V. Перекладіть речення, що містять "ing". Зазначте в дужках у кінці речення, чи є дана "ing" форма герундієм чи дієприкметником.

1. Moving is a form of existence of matter.
2. The engineer working at this problem found an original solution.
3. There are several ways of supplying energy.
4. Having made many tests the engineer obtained a result of great significance.
5. Using this method it became possible to produce rubber.
6. In making parts for automobiles engineers use different alloys

VI. Перекладіть такі речення, звертаючи увагу на особливості перекладу прийменників у сполученні з герундієм.

1. While constructing the device the engineers introduce some improvements.
2. By adding heat to a boiling liquid we make it change its state without changing its temperature.
3. On studying the nature of that new phenomenon, they were not satisfied with the results obtained.
4. Without understanding properly the major laws of mechanics it is difficult for the students to take part in research.
5. Having made a number of experiments, we succeeded in creating a new device.
6. In designing the device they used a lot of mathematical equations.

VII. Виберіть потрібну форму дієприкметника з наведених в дужках. Перекладіть одержані речення.

1. Technique (having reached, reaching, being reached) a high stage of development,

new methods of work became possible.

2.(Having discovered; discovering, being discovered) rich deposits of iron ore the people began to construct iron and steel works in this district.

4. The range of scientific problems (being discussed; discussing, having discussed) at the conference was very extensive.

5. The tools (producing, having produced, produced) by this plant are of the best quality.

6. The work (done, having done, doing) is equal to the energy lost.

7. The (having moved, being moved, moving) conveyer brings details to the shop.

VIII. Перекладіть речення, звертаючи увагу на обставинні словосполучення з дієприкметниками.

1. As seen from the article these engines are being produced in Odessa.

2. When carrying out the experiment the scientist came to the important conclusion.

3. Having finished the test the engineer published the results.

4. Any body, when heated to a sufficiently high temperature, becomes a source of light.

5. Being referred to in many works the Periodic law of elements proved its validity.

6. The law defining the properties of inertia was formulated by Newton.

IX. Перекладіть речення; підкресліть у них дієприкметникові звороти; обведіть кружком номери речень, які містять незалежний дієприкметниковий зворот.

1. Computers making calculations fast, engineers use them widely.

2. The problem being easy, the scientist solved it at once.

3. Having completed the test the engineer put down the results.

4. Industrial robots doing hard work, their use increases all over the world.

5. Nowadays computer-controlled machine-tools are widely used.

6. Automation being introduced, the productivity of labour increases greatly.

X. Перепишіть і усно перекладіть текст. Перекладіть письмово 2-й і 5-й абзаци.

Radio

1. In the early days of the telegraph and the telephone, men observed that signal sometimes jumped across the space between wires running next to each other, so that messages sent to one person went to another. They realized that electricity could pass through the air as well as along a wire.

2. Just as sound travels through the air in waves, so electricity travels through the air in what we call radio waves. A. S. Popov, a Russian inventor, had the idea of sending messages by radio waves, or "by wireless". He constructed a coherent detector for the study of lightning discharges and his receiver was described in 1895.

3. In fact, the radio waves travel in a straight line, but they are reflected from the sky, back to the earth's surface. This is how radio waves travel around the world. You have heard on the radio of "long-wave transmissions" and "short-wave transmissions". In fact, there are two ceilings in the sky, not solid ceilings like the ceiling in a room, but more like nets, which allow some radio waves to pass through them and reflect others. The lower ceiling is called "Heaviside layer". This reflects long waves. Short waves are reflected by the higher ceiling, called the "Appleton layer". Radio transmitters can also send out ultra-short waves. These waves pass through both layers in the sky but are useful for communicating with spaceships and can be used to send sound to very long distances when they are reflected from satellites in space.

4. It was exciting to be able to communicate over long distances by signals sent by wireless, but soon men wanted to try to broadcast the sound of voices and even music in this way. A modern broadcast transmitting station has an aerial from which sound waves are sent to the radio sets in people's houses.

5. However, broadcasting like this would not be possible without the use of valves in the transmitting station and inside the radio sets. Radio waves are sent out by alternating current. Valves at the transmitting station are used to keep the electric circuits oscillating, that is, sending the current backwards and forwards in the aerial. The number of times the current alternates decides the frequency, or wavelength, on which the station is broadcasting.

Notes:

- 1) insulation - ізоляція;
- 2) electric current - електричний струм;
- 3) to send a message - посилати повідомлення;
- 4) land - тут, країна, держава;
- 5) next to each other - паралельно;
- 6) to travel - тут: передавати;
- 7) it is exciting - заманливо;
- 8) valve - електронна лампа;
- 9) coherent - когерентний;
- 10) appleton layer - шар F_1 і P_1 іоносфери;
- 11) heaviside layer - шар E іоносфери.

XI Дайте відповіді на такі запитання.

1. What idea did A. S. Popov have?
2. What is the Heaviside layer?
3. How do satellites in space help us to broadcast?

XII. Знайдіть в тексті англійські еквіваленти таких дієслів. Укажіть іменники того ж кореня.

Модель: to help - допомогати → help - допомога

- | | |
|-------------------------|--------------------|
| 1) спостерігати | -.....-.....-..... |
| 2) одержувати, приймати | -.....-.....-..... |
| 3) описувати | -.....-.....-..... |
| 4) відбивати | -.....-.....-..... |
| 5) конструювати | -.....-.....-..... |
| 6) передавати | -.....-.....-..... |
| 7) використовувати | -.....-.....-..... |

Варіант 4

I. Перепишіть і перекладіть речення, позначте тип речення. Перекладіть українською або російською мовою.

1. If somebody wants to design a car of the advanced type he must take into account the properties of some of the new materials.
2. I think you should choose for your experimental circuit more simple and reliable design
3. Had there been better conditions, the construction of the new car body would have been finished much earlier.
4. If automatic control had been used, many variable parameters could have been measured and controlled.

5. If you see him, ask him to ring me up.
6. He was asked if he could finish his work in time.

II. Перепишіть речення; підкресліть в них дієслово-присудок (в стверджувальній, питальній, заперечній чи спонукальній формах); перекладіть українською або російською мовою.

1. Did American space probes take photographs of the far side of the Moon?
2. First check the temperature of the mixture.
3. Using their minds and working together men can solve almost any problem.
4. There are several standard units of length in use today such as meter, inch, foot, mile and centimeter.

5. Without electronic technology we couldn't solve this problem timely.

III. Перекладіть речення, звернувши увагу на форму вираження заперечення.

1. I could remember neither the name of the author nor the title of the book.
2. Without processing information it is impossible to plan and control production processes.
3. No data obtained were subjected to special analysis.
4. These instructions should not be followed by the operator.
5. I don't think all the necessary materials should be immediately sent for.
6. Why wasn't the car either locked or put into garage?

IV. Розподіліть наведені нижче неособові форми дієслова на три групи:

- a) як такі, що мають пасивний стан;
- b) означають дію, яка передує (передування) дії дієслова-присудка;
- c) означає дію, одночасну з дією дієслова-присудка.

starting, having been started, having started, being formed, having formed, studying, having been studied, having studied, having made, being made, using, having been used, having used, being received, having been received, having received.

V. Перекладіть речення, що містять "ing". Зазначте в дужках у кінці речення, чи є дана "ing" форма герундієм чи дієприкметником.

1. Computers are widely used for controlling industrial processes.
2. The rules of operating this machinery are very simple.
3. Making experiments they used computers for data processing.
4. Having been divided into equal portions, the data were fed into the memory of the computer from punch cards or magnetic tapes.
5. Studying foreign languages is necessary for future specialists.
6. Mastering the lab technique is necessary for scientists.

VI. Перекладіть речення, звертаючи увагу на особливості перекладу прийменників у сполученні з герундієм.

1. In making parts for automobiles engineers use different alloys.
2. The changes in the structure of any metal depend upon heating and the kind of the metal being heated.
3. By repeating the experiment you can get additional results.
4. In training specialists practice is as important as theory.
5. On receiving the answer of the firm we handed all the documents to our legal adviser.
6. After concluding the contract, the representative of the firm left Moscow.

VII. Виберіть потрібну форму дієприкметника з наведених в дужках. Перекладіть одержані речення.

1.(having collected, collecting, being collected) all the material, he was able to write a full report on the work of the commission.

2. The firm is interested in the purchase of automobiles (produced, producing, having produced) by one plant.

3. (returning, having returned, returned) from the expedition, he made a very interesting report.

4. The technology (applied, having applied, being applied) improved the quality of the goods obtained.

5. The metals (being used, having used) in our work possess many important properties, such as light weight, corrosion resistance, etc.

6. (being, been, having been) a source of heat and power, atomic energy can also serve as a source of creating useful products.

VIII. Перекладіть речення, звертаючи увагу на обставинні словосполучення з дієприкметниками.

1. Having been published, this scientific work had great influence on the future development of theory.

2. With the temperature falling rapidly, we were not able to carry out our work.

3. Computers represent a new branch of science, the first of them having appeared so long ago.

4. The problem having been solved, the engineer started a new experiment.

IX. Перекладіть речення; підкресліть у них дієприкметникові звороти; обведіть кружком номери речень, які містять незалежний дієприкметниковий зворот.

1. Using this method it became possible to produce such materials which, when processed in a certain way, can double the life of this device.

2. The plant having automated all industrial processes, production conditions became better.

3. The range of scientific problems being discussed at the conference was very extensive.

4. The temperature of the object raising, the speed of molecules increases.

5. The problem being of great importance, the scientist tackled it.

6. The details hardening, the equipment is more reliable.

X. Перепишіть і усно перекладіть текст. Перекладіть письмово 1-й і 2-й абзаци.

The Internet

1. The Internet, a global computer network which embraces millions of users all over the world, began in the United States in 1969 as military experiment. It was designed to survive a nuclear war. Information sent over the Internet takes the shortest path available from one computer to another. Because of this, any two computers on the Internet will be able to stay in touch with each other as long as there is a single route between them. This technology is called packet switching. Owing to this technology, if some computers on the network are knocked out (by a nuclear explosion, for example), information will just route around them. One such packet-switching network already survived a war. It was the Iraqi computer network, which was not knocked out during the Gulf War.

2. Most of the Internet host computers (more than 50%) are in the United States, while the rest are located in more than 100 other countries. Although the number of host computers can be counted fairly accurately, nobody knows exactly how many people use the Internet, there are millions, and their number is growing by thousands each month worldwide.

3. The most popular Internet service is e-mail. Most of the people, who have access to the Internet, use the network only for sending and receiving e-mail messages. However, other popular services are available on the Internet: reading USENET News, using the World- Wide Web, telnet, FTP, and Gopher.

4. In many developing countries the Internet may provide businessmen with a reliable alternative to the expensive and unreliable telecommunications systems of these countries. Commercial users can communicate over the Internet with the rest of the world and can do it very cheaply. When they send e-mail messages, they only have to pay for phone calls to their local service provider, not for calls across their countries or around the world. But who actually pays for sending e-mail messages over the Internet long distances, around the world? The answer is very simple: a user pays his/her service provider a monthly or hourly fee. Part of this goes towards its costs to connect to a larger service provider. And part of the fee got by the larger provider goes to cover its cost of running a worldwide network of wires and wireless stations.

Notes :

- 1) in touch with - у контакті;
- 2) e-mail — електронна пошта;
- 3) host computer - вузловий комп'ютер;
- 4) service provider - постачальник послуг;
- 5) packet switching - пакетна комутація;
- 6) network - мережа.

XI. Передивіться текст ще раз і дайте відповідь на такі запитання.

1. What can Internet provide its users with?
2. What do users have to pay for?
3. Where are the Internet host computers located?

XII. Знайдіть у тексті англійські еквіваленти іменників. Укажіть дієслова того ж кореня.

Модель:

допомога - help	допомогати - to help
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- 1) користувач -.....-.....-.....
- 2) ціна, вартість -.....-.....-.....
- 3) постачальник послуг -.....-.....-.....
- 4) повідомлення, відомість -.....-.....-.....
- 5) доторк, контакт -.....-.....-.....
- 6) служба, обслуговування -.....-.....-.....

Варіант 5

I. Перепишіть і перекладіть речення, позначте тип речення. Перекладіть українською або російською мовою.

1. If the resistance of plastics had not been so high they would have been attacked by inorganic acid.
2. If the researchers had not applied the new progressive method of work their experiment would have been a failure.
3. He was asked if he had tested the instruments before the experiment.
4. Unless you are more careful you will have an accident.
5. You would not have got into trouble if you had obeyed my instruction.
6. If you looked at the engine for a moment you would see what is missing.

II. Перепишіть речення; підкресліть у них дієслово-присудок (в стверджувальній, питальній, заперечній чи спонукальній формах); перекладіть українською або російською мовою.

2. When flowing through a conductor the alternating current reverses its direction at

regular intervals.

3. Unless provided with specific microprocessor the control system cannot work perfectly.

4. If developed a new type of semiconductor laser will be tested it at several plants.

III. Перекладіть речення, звернувши увагу на форму вираження заперечення.

1. No discoveries written about in this article were made last year.

2. Neither these nor those polymers are capable of withstanding high temperatures.

3. There is nobody in the room to solve this difficult problem.

4. He told me nothing about this new experiment.

5. They didn't say that they had been working hard all the time.

6. I remember none of the figures, which he mentioned in this report.

IV. Розподіліть наведені нижче неособові форми дієслова на три групи:

a) як такі, що мають пасивний стан;

b) означають дію, яка передуює (передування) дії дієслова-присудка;

c) означає дію, одночасну з дією дієслова - присудка.

Зважте, що кожна форма групи "а" обов'язково повинна також входити в одну із таких двох груп:

moving; having moved; being moved; having been moved; having broken; breaking; having been broken; being broken; being obtained; obtaining; having been obtained; having obtained; having been tested; testing; being tested; having tested.

V. Перекладіть речення, що містять "ing" . Зазначте в дужках у кінці речення, чи є дана "ing" форма герундієм чи дієприкметником.

1. The devices standing on the platform have been made in our plant.

2. Tomorrow morning they will be continuing to discuss the results of his experiment.

3. Using new methods we shall continue to increase accuracy and speed of analysis.

4. Everything depends on the contract being cancelled in time.

5. I don't mind helping you, but I object to being disturbed when I am busy.

6. Many scientists are working out devices for fuller harnessing of solar energy, some results having been achieved both in our country and abroad.

VI. Перекладіть речення, звертаючи увагу на особливості перекладу прийменників у сполученні з герундієм.

1. I shall not be able to translate this document without looking up a few words in the dictionary.

2. On discussing the matter for an hour the committee left without reaching any decision.

3. Computers are widely used for processing business information.

4. In solving these mathematical equations we can use our knowledge.

5. Upon being heated, the molecules begin moving about very rapidly.

6. By changing pressure one can change the boiling point of this mixture.

VII. Виберіть потрібну форму дієприкметника з наведених в дужках. Перекладіть одержані речення.

1. ... (being placed, placing, having placed) in a liquid, a body will sink until it has displaced its own weight of the liquid.

2. During the past ten years we have seen an enormous increase in the sensitivity of the devices (used, using, having used) in cosmic communication.

3. The goods (required, requiring, having required) could not be shipped immediately.

4. The ion of a metal, (being lost, having lost, having been lost) electrons, it becomes electrically positive.

5. The laws of motion (having stated, stated, stating) by Newton are very important for science.

6. ... (having introduced, introducing, being introduced) the first section of the automatic control system the designers relieved many specialists.

VIII. Перекладіть речення, звертаючи увагу на обставинні словосполучення з дієприкметниками.

Though conducted with great care, the test did not give the expected results.

When following through a conductor the alternating current reverses its direction at regular intervals

Unless provided with specific microprocessor the control system cannot work perfectly.

If developed a new type of semiconductor laser will be tested it at several plans.

IX. Перекладіть речення; підкресліть у них дієприкметникові звороти; обведіть кружком номери речень, які містять незалежний дієприкметниковий зворот.

1. In one of the plants visited, the delegates were shown new types of equipment.

2. Aluminum is the most abundant metallic element in nature, one-twelfth of the earth's crust consisting of aluminum compounded with other elements.

3. A given number of operations having been done, the machine stopped automatically.

4. The installation was automated last year, its capacity rising by 25 per cent.

5. Technique having reached a high stage of development, new methods of work became possible.

6. Robots being able to perform work that requires simple motion, they can relieve human operators from routine and monotonous work.

X. Перепишіть і усно перекладіть текст. Перекладіть письмово 1-й і 3-й абзаци.

Data Entry Devices

1. One of the most common ways to input data into the computer is through the use of the computer keyboard. The computer keyboard is fashioned after a normal typewriter keyboard. The major difference is that computer keyboard has more keys than typewriter. The extra keys are necessary to send special characters to the computer. The keyboard is primary data entry device used to enter commands and data by typing out words and numbers. The difference between the typewriter and computer keyboard is that the latter has additional punctuation and special computer control keys.

2. Most noticeable is the addition of the escape key (sometimes called the altmode key), the break key will modify the actions of the next few keys pressed after the escape or the altmode key. For example sequences (the pressing of a sequence of keys beginning with the escape key) are often used to clear the screen on a video terminal or to cause words to be highlighted. To understand the effect of pressing the control or escape keys consult your instruction book.

3. Many keyboards have features that aid to enter data for interactive graphics tasks, but more often so-called graphics input devices are used instead. Graphic input devices allow operator to enter data in an easy "to-interpret graphic form, primarily to specify lines and points. This task is usually accomplished by controlling the position of a set of cursor cross-hairs on the screen. Some devices are touched onto the screen for more direct interaction. Graphic-input devices are also used to select items from a menu.

4. The major types of graphic-input devices are lightpens, joysticks, track-balls, digitizers, and voice data entry devices. In addition, automated drawing entry devices can be used to permit input of an entire document without manual intervention.

Notes:

- 1) is fashioned after - побудована за зразком;
- 2) escape key = altmode key — клавіша переходу;
- 3) break key = interrupt key - клавіша переривання;
- 4) cross-hairs — хрест низок;
- 5) control key - клавіша керування;
- 6) shift - переведення регістра.

XI. Передивіться ще раз 2-й абзац і дайте відповідь на такі запитання.

1. What is the function of a shift key?
2. What are sequences often used for?
3. What do they call «sequences»?

XII. Знайдіть в тексті англійські еквіваленти іменників. Укажіть дієслова того

ж кореня.

Модель	допомога – help → допомогати – to help
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- 1) користь -.....-.....-.....
- 2) різниця, відмінність -.....-.....-.....
- 3) функція -.....-.....-.....
- 4) прес -.....-.....-.....
- 5) форма -.....-.....-.....
- 6) взаємодія -.....-.....-.....
- 7) складання, додавання -.....-.....-.....

КОНТРОЛЬНЕ ЗАВДАННЯ № 3

Для правильного виконання цього завдання необхідно опрацювати за рекомендованими підручниками і методичними посібниками (див. список рекомендованої літератури) такі розділи курсу англійської мови:

1. Безособові і неозначено-особові речення.
2. Багатозначність "it, that, one".
3. Підрядні сполучники підрядних речень.
4. Багатозначність "since, for, as, before, after".
5. Інфінітив (форми і функції інфінітива).
6. Інфінітивні звороти.
7. Іменні означальні словосполучення (у функції лівого означення).

Варіант 1

I. Перепишіть речення, в яких вживаються слова "it, that, one", перекладіть їх, урахувавши багатозначність і багатofункціональність цих слів.

1. The result obtained is identical with that described in the paper you gave me.
2. That the method of investigation depends on the character of the material being analyzed is quite evident.
3. One can understand why the profession of an engineer requires comprehensive training.
4. It was necessary to solve a number of problems. And we did it. But there remained one more problem to solve, the one that requires the knowledge of thermodynamics.
5. It is difficult to give a satisfactory definition of temperature without implying the concept of heat.

II. Перекладіть речення, позначте вертикальними рисками межу головного і підрядного.

1. The three states matter can exist in are solid, liquid and gas.
2. We use only a small part of the energy the earth receives from the sun.
3. The subject they have chosen for their discussion is connected with the physics of fluids.
4. The atomic weight of an atom is the number of protons and neutrons it contains.
5. The problem the scientists of the 20-century had to solve was to arrange electronic components in computing devices in the most effective way.
6. Storage is the unit information is kept in.

III. Перепишіть і письмово перекладіть речення, враховуючи неоднозначність підкреслених слів.

1. As the temperature rises the speed of molecular motion increases.
2. Most of the energy our planet receives from the sun cannot be used as it is reflected by the surface of the earth back into space.
3. As soon as melting point is reached ice begins melting.
4. As for industrial robots they are basically singlearm devices.
5. Industrial robots are devices for manipulating parts of tools.
6. He could not solve this problem for it was too complicated for him.
7. Since that time computers began to be used on a larger scale.
8. Now the computer will do all the necessary operations itself since the information and all the necessary instructions have been introduced into its memory unit.
9. After the lecturer had finished his lecture the students asked him many questions.
10. After the lecture the students asked many questions as the problem the lecture was

devoted to was rather complicated.

IV. Прочитайте наведені нижче форми інфінітива. Запишіть у стовпчик ті форми, які виражають:

- а) пасивний стан;
- б) одночасність з дією, вираженою дієсловом – присудком;
- с) такі, що передують (передування) йому.

Урахуйте, що одна і та ж форма може входити в дві групи ("а " і "в " чи "а " і "с"):

to provide; to have been equipped; to be developed; to have measured; to be informed; to inform; to have been calculated; to be calculating; to form; to have formed; to be producing; to have been produced.

V. Перепишіть і письмово перекладіть речення, підкресливши у них інфінітив (двома рисками), і ті слова, що відносяться до нього, одною рисою.

1. The solar cells to be installed in space vehicles will convert solar radiation into electricity.

2. The simple principle of focusing the sun's rays by mirrors has been applied to create a very-high-temperature furnace for melting metal alloys.

3. To obtain a really high temperature for such furnaces by traditional methods is not easy.

4. To decrease the volume of liquid a very high pressure must be used.

5. The power station is to supply several towns with cheap energy.

VI. Перепишіть і письмово перекладіть речення, звертаючи увагу на інфінітивні звороти.

1. He expects the problem to be solved in a week period.

2. We believe him to be carrying out an interesting experiment.

3. Microcomputers are likely to be the first computers to use a single microprocessor chip as a processor.

4. They consider his proposal to be rather interesting.

5. The volume and accessibility of data are known to play an important role.

6. Any engineer knows the choice of the most economical manufacturing process to be of great importance.

7. Having explained the principle of operation of his device, Popov asked the audience to watch its operation attentively.

VII. Перекладіть такі іменні означальні словосполучення. Запам'ятайте, що означене слово завжди стоїть у кінці такого словосполучення.

- 1) high-speed information processing;
- 2) different economic management methods;
- 3) power consumption changes;
- 4) man-made earth satellites;
- 5) steadily increasing consumer goods number;
- 6) Semiconductor devices fabrication.

VIII. Перепишіть і письмово перекладіть речення, в яких вживаються різні види означень.

1. The ability to amplify weak signals is one of the most important vacuum tube properties.

2. Feedback (обратная связь) control systems serve us not only in different production processes but also in our everyday life.

3. A new Polish Academy of Sciences digital computer ZAN-41 is a medium-size

machine, intended for high-speed calculations, data recording and processing or for technological process control.

IX. Перепишіть текст. Уважно прочитайте його і усно перекладіть. Перекладіть письмово 5-й і 8-й абзаци.

Computers in Modern Society

1. The word "computer" comes from a Latin word which means "to count". A computer is really a very special kind of counting machine. Initially, the computer was designed as a tool to manipulate numbers and thus solve arithmetic problems. Although designed originally for arithmetic purposes at present it is applicable for a great variety of tasks.

2. Nowadays computers may be stated to have become an important and powerful tool for collecting, recording, analysing, and distributing tremendous masses of information.

3. Just as television has extended human sight across the barriers of time and distance, so the computers extend the power of the human mind across the existing barriers. They multiply the capacity of the mind to deal with information in endless variations and almost limitless quantity.

4. Viewed in the contemporary scene and historical perspective the computer simulates man. Indeed, two important and highly visible characteristics of man are his intelligence and his ability to perform in and control his environment. That is why it is quite clear that man's attempts to understand the phenomena of intelligence control and power have lead to simulations of his brain, of himself and of organizational and group structures in which he most often finds himself

5. Surely, there are similarities with human brain, but there exists one very important difference. Despite all newest achievements and innovations, the so-called electronic brain must be programmed by a man.

6. A computer is nothing more than a collection of circuits that do a few simple tasks, at one time. The key is the speed at which these circuits operate and signals that control the flow of electricity through the circuits.

7. Today it would be difficult to find any sphere of human activity, which could do without computers. In science computers make calculations and analyse masses of measurements, such as sequential positions and velocities of a spacecraft and solve extraordinary long and complex mathematical problems, such as the trajectory of spacecrafts. In commerce they record and process inventories, purchases (накладные, покупки), bills, payrolls (счета, платежные ведомости), bank deposits and the like. In industry they monitor and control manufacturing processes. In government they keep statistics and analyse economic information.

8. Although intended for different purposes computers virtually do not differ in structure. Regardless of their size and purpose most computer systems consist of three basic elements: the input-output unit, the memory hierarchy and the central processing unit. The input-output section is the path whereby information is fed into the computer or taken out of it. The memory hierarchy stores the instructions and the data so that they can be retrieved quickly on demand by the central processing unit (CPU). The CPU controls the operation of the entire system by issuing commands (подавать команды) to the other parts of the system and by acting on the responses.

X. Передивіться текст ще раз і дайте відповіді на запитання.

1. What word does the term "computer" come from?

2. What purposes were first computers designed for?

3. Why do we say that computers multiply the capacity and power of the human mind?

4. What operations can computers do when processing information?

XL Укажіть значення слів, знайдіть в тексті і напишіть їхні антоніми.

Модель: new (новий) —> old — (старий)

- 1) unreal -.....-.....-.....
- 2) finally -.....-.....-.....
- 3) powerless -.....-.....-.....
- 4) to divide -.....-.....-.....
- 5) ancient -.....-.....-.....
- 6) easy -.....-.....-.....

XI. Перекладіть дієслова. Знайдіть в тексті чи в словнику іменники того ж кореня.

To solve - вирішувати; solution - вирішення

- 1) to mean -.....-.....-.....
- 2) to manipulate -.....-.....-.....
- 3) to inform -.....-.....-.....
- 4) to collect -.....-.....-.....
- 5) to exist -.....-.....-.....
- 6) to organize -.....-.....-.....
- 7) to operate -.....-.....-.....
- 8) to differ -.....-.....-.....

Варіант 2

I. Перепишіть речення, в яких вживаються слова "it, that, one", перекладіть їх, урахувавши багатозначність і багатофункціональність цих слів.

1. It is shown in textbooks of thermodynamics that one particular scale of temperature, the perfect-gas (ідеальний газ) scale, has special significance, because it is identical with the absolute thermodynamic scale of temperature.

2. To measure temperature it is necessary to choose some kind of temperature scale; it may be done by means of some substance that changes with the change of temperature.

3. It is necessary to have some force to cause electrons to leave their orbits.

4. The development of electrical engineering began earlier than that of aeronautics.

5. One must apply the latest scientific achievements to the design and construction of various structures.

II. Перекладіть речення, позначте вертикальними рисками межу головного і підрядного.

1. Now let us analyze the particles an atom consists of.

2. Electronic computers perform calculations with the speed no human brain is capable of.

3. All the operations modern computers perform can be divided into two groups.

4. A computer can keep all the information you introduce into its memory.

5. The problem we have to solve is rather complicated.

6. The machine we are speaking about is a general-purpose computer.

III. Перепишіть і письмово перекладіть речення, враховуючи неоднозначність підкреслених слів.

1. As a substance becomes heated it expands.

2. Thermometer is widely used as a device for measuring temperature.

3. All robots, however, can be classified as either nonservo or servocontrolled.

4. This device is preferable as it is less expensive and has higher speed operation.

5. Nonservo robots have limited flexibility for they are usually hardwired, (жестко армированный; стационарный)

6. First adding machines were used for calculating taxes.
7. Since 1940 electronics began to develop at an ever increasing speed.
8. Since there is no fluid between the earth and the sun heat cannot be transmitted to the earth by convection.

9. After the experiment the results were discussed.

10. After the experiment was finished the results were discussed.

IV. Прочитайте наведені нижче форми інфінітива. Запишіть у стовпчик ті форми, які виражають

- a) пасивний стан;
- b) одночасність з дією, вираженою дієсловом - присудком;
- c) такі, що передують (передування) йому.

Урахуйте, що одна і та ж форма може входити в дві групи ("а" і "в" чи "а" і "с"):

to change; to be changed; to have been installed; to install; to be installed; to have converted; to have been converted; to be converting; to convert; to introduce; to have introduced; to be introduced.

V. Перепишіть і письмово перекладіть речення, підкреслив у них інфінітив (двома рисками) і ті слова, що відносяться до нього, одною рисою. Укажіть в дужках функцію, яку виконує в реченні інфінітив чи інфінітивна група:

- a) підмет;
- b) частина складного присудка;
- c) означення;
- d) обставина.

1. The machinery to be installed in our shop is provided with automatic devices.
2. The work is to be checked up very carefully to make sure that there are no mistakes.
3. To be processed by the computer the data should be expressed in numerical form.
4. To do arithmetic operations is the main job of the operations unit.
5. The first step in the design of special-purpose equipment is a detailed study of the system to be mechanized.

VI. Перепишіть і письмово перекладіть речення, звертаючи увагу на інфінітивні звороти.

1. Holographic television is expected to be used for special purposes in the nearest future.
2. Solar energy has proved to be an ideal source of power for artificial satellites.
3. We know the solar energy is to be produced by fusion (слияние) of hydrogen atoms into helium atoms.
4. Popov made his new device serve two purposes: to send signals and to record the received signals.
5. We consider steam to be dry or saturated (насыщенный) when it does not contain suspended water particles.

6. Radio engineering is known to have been greatly developed since World War II.

7. When the speed of the waves is known the measurement of the time which elapses between the transmission of microwave pulses and the arrival of the reflected waves is considered to be the only operation necessary to locate the object which caused the reflection.

VII. Перекладіть іменні означальні словосполучення. Запам'ятайте, що означене слово завжди стоїть у кінці такого словосполучення.

1. exceedingly low power consumption;
2. higher integration level;
3. limited memory device volume;

4. single-crystal semiconductor material;
5. specific enterprise organization;
6. new production management concept.

VIII. Перепишіть і письмово перекладіть речення, в яких вживаються різні види означень.

1. The extremely fast access time of less than 10 microseconds makes the magnetic core the best primary memory device for the large, very fast computers.
2. The construction of the world's biggest television centre, the Moscow centre, housed in the 533-metre high Ostankino television tower had been completed by 1970.
3. The application of powerful outerspace relays makes possible televising programmes directly to huge territories.

IX. Перепишіть текст. Уважно прочитайте його і усно перекладіть. Перекладіть письмово 5,7,8,9,10 і 11-й абзаци.

Electronics and Microelectronics

1. The evolution of electronic technology is sometimes called a revolution. What we have seen has been a steady quantitative evolution: smaller and smaller electronic components performing increasingly complex electronic functions at ever higher speeds. And yet there has been a true revolution: a quantitative change in technology has given rise to qualitative change in human capabilities.

2. It all began with the development of the transistor.

3. Prior to the invention of the transistor in 1947 its function in an electronic circuit could be performed only by a vacuum tube. Tubes were produced in so many shapes and sizes and performed so many functions that in 1947 it seemed quite impossible that the transistor would be able to compete with them except in limited applications.

4. The first transistors had no striking advantage in size over the smallest tubes and they were more costly. The greatest advantage of the transistor was exceedingly (чрезвычайно) low power consumption. Besides they promised greater reliability and longer life. However it took years to demonstrate other transistor advantages.

5. Early transistors are often said to have been a size of a pea. They could respond at a rate (со скоростью) of a few million times a second. This was enough to serve in radio circuits but far below the speed needed for high-speed computers or for microwave communication systems.

6. It was, in fact, the effort to reduce the size of transistors so that they could operate at higher speed that gave rise to the whole technology of microelectronics.

7. The aim of this extraordinary miniaturization is not so much to make circuits small as to make them rugged, long-lasting, low in cost and capable of performing electronic functions at extremely high speeds. It is known that the speed of response (реагирование) depends primarily on the size of transistor: the smaller the transistor, the faster it is.

8. It may be useful to say a few words about four of the principal devices of electronic circuits: resistors, capacitors, diodes and transistors. Each device has a particular role in controlling the flow of electrons so that the completed circuit performs some desired function.

9. During the past decade the performance of electronic systems increased manifold by the use of ever larger numbers of components and they continue to evolve. Modern scientific and business computers, for example, contain 109 elements; electronic switching systems contain more than a million components.

10. The tyranny of numbers began to concern the scientists as early as 1950. The overall reliability of the electronic system is inversely proportional to the number of individual components. A very serious shortcoming was also the universal practice to manufacture each of the components separately and then assemble the device by wiring (монтируя) them

together.

11. What provided the solution was the semiconductor integrated circuit, the concept of which had begun to take shape a few years after the invention of the transistor.

X. Перечитайте текст ще раз і дайте відповіді на запитання.

1. What invention did the revolution in electronics begin with?

2. How did a quantitative change in electronic technology influence human capabilities?

3. When was transistor invented?

4. What device performed the functions of the transistor in an electronic circuit prior to its invention?

XI. Укажіть значення слів, знайдіть в тексті і напишіть їхні антоніми.

Модель: speed (швидкість) -> velocity

1) for instance -.....-.....-.....

2) little -.....-.....-.....

3) instrument -.....-.....-.....

4) every -.....-.....-.....

5) form -.....-.....-.....

6) cheap -.....-.....-.....

7) quicker -.....-.....-.....

8) main -.....-.....-.....

XII. Перепишіть наведені нижче іменники, перекладіть їх і вкажіть дієслова, похідними від яких вони є.

Модель: transmission (передача) —> to transmit (передавати)

1) performance -.....-.....-.....

2) dependence -.....-.....-.....

3) solution -.....-.....-.....

4) invention -.....-.....-.....

5) application -.....-.....-.....

6) consumption -.....-.....-.....

Варіант 3

I. Перепишіть речення, в яких вживаються слова "it, that, one" , перекладіть їх, урахувавши багатозначність і багатофункціональність цих слів.

1. There are many Russian equivalents of the word "engineering"; this makes it sometimes difficult to find the proper one.

2. The rivers in the western part of Russia are not so long as those in the eastern part.

3. When energy is converted from one form to another some energy is lost.

4. When a body is acted upon by some external force it changes the direction of its motion.

5. It may be said that in the near future electronics will continue to progress.

II. Перекладіть речення, позначте вертикальними рисками межу головного і підрядного.

1. The main units a computer consists of are input, output, memory, control and operational section.

2. Some of the materials we speak about can exist as crystals of different form.

3. Everybody knows Kurchatov was the founder of the atomic might of our country.

4. The new method he proposes can be relied upon.

5. In everyday life the word "work" is applied to any form of activity a man does.

6. The factor we are dealing with is the one of converting heat units into units of mechanical energy.

III. Перепишіть і письмово перекладіть речення, враховуючи неоднозначність

підкреслених слів.

1. Before people can fly to other planets they have to accumulate a lot of information about heavenly bodies.

2. Utilizing solar power on large scale means getting possession of an immense source of power.

3. Radio and television play an important role as a means of people's political and cultural education.

4. The energy of the Sun is converted into electric energy by means of solar batteries.

5. The number of plants provided with numerically controlled machine-tools is rapidly increasing.

6. Provided the mass of the Earth was twice as great as it is, it would attract any body twice as strongly.

7. Neither of the engines has satisfactory efficiency.

8. There is a group of materials which are neither good conductors nor good insulators.

9. The nucleus of hydrogen contains but one proton.

10. The proton and neutron have almost the same weight, but the electron weights only 1/2,000th as much as proton or neutron.

IV. Прочитайте наведені нижче форми інфінітива. Запишіть у стовпчик ті форми, які виражають: а) пасивний стан,

б) одночасність з дією, вираженою дієсловом - присудком,

с) такі, що передують (передування) йому.

Урахуйте, що одна і та ж форма може входити в дві групи ("а " і "в " чи "а " і "с"):

to recognize; to have been recognized; to be recognized; to have recognized; to be emitted; to have emitted; to have been emitted; to form; to have formed; to be forming; to have been formed; to be radiating; to be radiated; to have been radiated; to radiate; to have radiated.

V. Перепишіть і письмово перекладіть речення, підкреслив у них інфінітив (двома рисками) і ті слова, що відносяться до нього, одною рисою. Укажіть в дужках функцію, яку виконує в реченні інфінітив чи інфінітивна група:

а) підмет;

б) частина складного присудка;

с) означення;

д) обставина.

1. The terminals should be coated with vaseline to prevent sulphating and corrosion, (sulphating - покриття солями сірчаної кислоти)

2. To measure the electric current is not difficult if you have an ammeter.

3. A quartz crystal is pressed against the surface of the metal to be tested.

4. Ultrasonic method is used to study the ocean bottom, to locate shoals offish or to detect some danger in navigation.

5. The arrangement of the components in each module is determined by the mathematical functions to be performed.

VI. Перепишіть і письмово перекладіть речення, звертаючи увагу на інфінітивні звороти.

1. We know the strength of current to depend upon the resistance of the circuit.

2. For a long time the atom was thought to be indivisible.

3. If considered from this point of view the problem seems to be rather complicated.

4. The history of automatic computers is believed to have started with Charles Babbage, a professor of Cambridge University.

5. We expect most bodies to expand when heated.

6. Every atom is known to be composed of at least one electron in addition to a central nucleus.

Sound is established to travel in water at the speed of about a mile per second, the exact speed depending upon the temperature of water.

VII. Перекладіть іменні означальні словосполучення. Запам'ятайте, що означене слово завжди стоїть у кінці такого словосполучення:

- 1) data entry devices;
- 2) graphic input devices;
- 3) coded radio transmission;
- 4) powerful electric power system;
- 5) electric power distribution;
- 6) external circuit elements.

VIII. Перепишіть і письмово перекладіть речення, в яких вживаються різні види означень.

1. The outer walls of the house are covered with light coloured film of plastics.

2. The buildings intended to house large machine-tools should have special construction.

3. The next problem to be faced with is to design extremely sensitive transducers (датчики) for the experiment.

IX. Перепишіть текст. Уважно прочитайте його і усно перекладіть. Перекладіть письмово 1,3,4 і 6-й абзаци.

Computers

1. As the applications for computers increase and as the requirements for up-to-date information grow, there will be a greater demand for data transmission equipment. Data transmission systems perform such functions as connecting together a production line and a data processing center, sending the latest marketing and production facts from the field¹ to a data processing center, and providing management with up-to-date information for more accurate forecasting, inventory control, and money saving. The common medium used for data transmission is telephone lines.

2. IBM has experimented with low-power, microwave transmission, and this could extend the capabilities of its Tele-Processing system for long-distance computer-to-computer communications to areas where common carrier facilities are not available, or where customers wish their own facilities. The linking of advanced communication devices with data-processing systems will provide the big breakthrough in real-time total management information systems.

3. The Government is the largest user of computers. Computers are being used for a number of new applications by the government in the non-military field. The

Internal Revenue Service has turned to computers to process its 95 million tax returns³. The only logical means to handle all this paper work is high-speed electronic equipment.

4. The Social Security Administration⁴ is using computers to speed up the processing of claims for social security benefits. Information is produced on magnetic tape, which can be fed directly to the computing center for further processing. The government is employing computers in very sophisticated applications to increase the governing efficiency.

5. The military⁶ has been the largest developer and user of computer technology to

date. The military value of improved computer characteristics has led to the support of government-sponsored research projects which the computer industry would not have undertaken on its own. Due to the requirements of space, speed, and reliability, military control and command systems are far more sophisticated than commercial systems. However, many of the techniques developed by the military are adaptable to business systems.

6. The space program has also opened up a huge market for computers. Four large digital computers form a network during an orbital mission, and provide a running display with important launch, orbital and re-entry⁷ information. Computers, with the help of radar are known to have been used in achieving orbital rendezvous during the first U.S. lunar landing mission. The importance of the military market to the computer industry is indicated by the fact that annual shipments to this segment of the market are steadily growing.

Notes:

- 1) field - тут: місце установки (монтажу);
 - 2) Internal Revenue Service - Податкове управління США;
 - 3) Tax returns - податкові надходження;
 - 4) Social Security Administration – тут: Міністерство (відомство) соціального страхування;
 - 5) Security benefits - тут виплати (допомога) по страхуванню;
 - 6) Military - тут військове відомство;
 - 7) Re-entry - повторний;
- Rendezvous - рандеву (зустріч).

X. Передивитись текст ще раз і дайте відповіді на запитання.

1. How could the introduction of low-power microwave transmission influence the capabilities of the IBM Tele-Processing system?
2. How does the author of the text name the linking of advanced communication devices with data-processing systems?
3. Who was the largest developer and user of computer technology?
4. Is it possible to adapt some of the techniques developed by the military to business systems?

XI. Укажіть значення слів, знайдіть в тексті і напишіть їхні синоніми.

Модель: speed (швидкість) —> velocity

- | |
|---------------------------|
| 1) use, n. - |
| 2) demand, n. - |
| 3) data, n. - |
| 4) to link - |
| 5) desire, n. - |
| 6) instrument, n. - |
| 7) branch, n. - |
| 8) to accelerate - |

XII. Перепишіть і перекладіть дієслова. Знайдіть в тексті іменники, похідні від даних дієслів, перекладіть їх.

Модель: to apply (застосовувати) —> application

- | |
|------------------------|
| 1) to equip - |
| 2) to produce - |
| 3) to transmit - |
| 4) to carry - |
| 5) to require - |
| 6) to develop - |

Варіант 4

I. Перепишіть речення, в яких вживаються слова "it, that, one" перекладіть їх, урахувавши багатозначність і багатофункціональність цих слів.

1. A warm air column will weigh less than that of cold air if both are of the same height and cross section.

2. It is difficult for the first-year student to take part in this discussion.

3. It is interesting to mention that at least a hundred organic compounds are added every day.

4. If one engine does twice as much work as another in one minute, then it has twice the power.

5. One should pay more attention to the results of those experiments.

II. Перекладіть речення, позначте вертикальними рисками межу головного і підрядного.

1. Practical experience he got during his work at the factory enabled him to master theoretical subjects rather quickly.

2. The range of functions this computing equipment can perform should be broadened.

3. Were there no atmosphere, the surface of the Earth would become too hot by day and too cold at night.

4. He said we should not create and bring into operation this installation.

5. I think the results he has got are not very reliable.

6. Now the scientists are studying the information they received from the space satellites.

III. Перепишіть і письмово перекладіть речення, враховуючи неоднозначність підкреслених слів.

1. Once the machine has been designed and built, once it has been programmed, it's sufficient to push a button and let it proceed.

2. Since that time computers began to be used on a larger scale.

3. As the temperature rises the speed of molecular motion increases.

4. Most of the energy our planet receives from the sun cannot be used as it is reflected by the surface of the earth back into space.

5. The analysis was accurate for it was made by qualified specialists.

6. This material is especially good for this purpose as it possesses all the necessary properties.

7. We now pass to the description of how steam is generated.

8. As you know, logical operations include comparing, selecting, sorting and matching.

9. Before the beginning of the operation the engine was carefully inspected.

10. The feed-water heater heats water before it enters the boiler.

IV. Прочитайте наведені нижче форми інфінітива. Запишіть у стовпчик ті форми, які виражають:

а) пасивний стан,

б) одночасність з дією, вираженою дієсловом - присудком,

с) такі, що передують (передувannya) йому.

Урахуйте, що одна і та ж форма може входити в дві групи ("а" і "в" чи "а" і "с"):

to position; to have been positioned; to be positioned; to be positioning; to be mixed; to mix; to have mixed; to have been mixed; to have equipped; to equip; to be equipped; to have been equipped; to be equipping; to design; to have designed; to be designed; to be designing.

V. Перепишіть і письмово перекладіть речення, підкресливши в них інфінітив (двома рисками) і ті слова, що відносяться до нього, одною рисою. Укажіть в дужках функцію, яку виконує в реченні інфінітив чи інфінітивна група:

- a) підмет;
- b) частина складного присудка;
- c) означення;
- d) обставина.

1. A filter is used to smooth off pulsating direct current so that it can be used in a radio circuit.

2. The apparatus to be designed is to be used at the power-station.

3. The effect of connecting cells (елемент) in series is to increase- the total voltage.

4. To find out the state of a mass of a gas is quite possible.

5. To find out the state of a mass of a gas one should know its volume, its pressure and its temperature.

VI. Перепишіть і письмово перекладіть речення, звертаючи увагу на інфінітивні звороти.

1. The approach to this problem was supposed to be wrong.

2. Engineers consider computing equipment to make production process more effective.

3. Numerical control is certain to increase the efficiency of the machine-tools.

4. We expect the results we have obtained to be absolutely reliable.

5. This is the information for you to process by tomorrow.

6. The knowledge of general engineering subjects is believed to be the basis for the study of special subjects.

7. This field of computers application is likely to be entirely unexplored at present.

VII. Перекладіть іменні означальні словосполучення. Запам'ятайте, що означене слово завжди стоїть у кінці такого словосполучення:

- 1) replaceable parameters fields;
- 2) computer-aided manufacturing systems;
- 3) telephone communication requirements;
- 4) this machine operation;
- 5) magnetic field influence;
- 6) heat-to-electricity conversion.

VIII. Перепишіть і письмово перекладіть речення, в яких вживаються різні види означень.

1. The vacuum between the walls of the house is filled with an excellent thermal-and sound-proof material.

2. The test referred to above can be easily made.

3. The device to be described in this chapter is quite new and rather complicated.

IX. Перепишіть текст. Уважно прочитайте його і усно перекладіть. Перекладіть письмово 4,5-й і 7-11-й абзаци.

Ukraine's Economy in the Context
of International Economic Relations

1. On the map of the world appeared a new independent state with a thousand-year old history - Ukraine.

2. Having recently gained its independence, Ukraine is a country comparable in geographical size and population to Italy and France. Ukraine is situated in the geographical center of Europe. The country occupies a territory of 64 thousand square kilometers.

3. The country possesses a strategic geographical position and mild climate, rich natural resources, sizeable consumer market, highly educated labour force, well developed transport infrastructure, significant achievements in natural sciences and military related research and a sophisticated research and development infrastructure.

4. Ukraine is the first in Europe in iron ore extraction, production of steel, cast iron, tractors, mineral fertilizers, sugar, and grain; second in coal mining, and third in producing concrete, electric energy and various equipment.

5. However, the Ukrainian economy is currently in a critical position. This is due to the fact that the economy of Ukraine was previously quite isolated, not oriented towards satisfying the national interest of the country. The pricing policy was basically inappropriate because the prices for raw materials and fuel supply were very low and were not stimulating their rational use and the introduction of high technology in industry.

6. Ukraine is rich in natural resources. It can completely satisfy the needs in iron, manganese and titanium ores, as well as rock salt, cement, gypsum, heat resistant clays, bromine, graphite, mercury and uranium. Deposits of ammonium, nickel, polymetallic and magnesium ores were discovered and developed industrially. These resources can be exported. Ukraine's annual coal extracting is about 150 million tons. Industrial development of rich deposits of brown coal, combustible slates and peat is being carried out. Exploration of new deposits of oil is being carried out which will considerably improve the economic situation of the country.

7. Oil and gas pipelines of international significance go through the territory of Ukraine. Fees from transit oil pipelines pay for most of the imported oil. Natural and human resources of the country are sufficient for creating a developed internal market and becoming an equal partner in the world market. So, there is every reason to believe that Ukraine can enter the family of Europe's leading countries.

8. Prior to independence, more than 80 per cent of total "export" and "import" were accounted for by inter-republic trade. Needless to say, that the severance of the inter-republic links had a particularly disruptive effect on Ukrainian enterprises and on the national economy as a whole.

9. The foreign trade linkages of Ukraine will no doubt play a key role in the recovery of the Ukrainian economy in this transition period.

10. Upon gaining independence in 1991, Ukraine has become an equal member of the international community. There is a little doubt that the economic, scientific and human potential of Ukraine is one of the most promising in Europe and offers many business and investment opportunities.

11. Attraction of new investments in the Ukrainian economy, including foreign investments, is one of the effective ways of overcoming the present-day crucial situation.

Notes:

- 1) cast iron - чавун;
- 2) the pricing policy - політика цін;
- 3) raw materials - сировина;
- 4) combustible slates - горючі сланці;
- 5) peat - торф;
- 6) severance - відділення.

X. Перегляньте текст ще раз і дайте відповіді на запитання.

1. What European countries is Ukraine comparable to in size and population?
2. What is the territory occupied by Ukraine?
3. What is the intellectual potential of Ukraine?
4. What natural resources is Ukraine rich in?

XI. Знайдіть в тексті і выпишіть похідні від наведених нижче дієслів. Перекладіть ті та інші.

Модель: to rely on (покладатися на) → reliable

- | | |
|----|-------------------------------|
| 1) | to attract -.....-.....-..... |
| 2) | to compare -.....-.....-..... |
- 3) to populate -.....-.....-.....
 4) to achieve -.....-.....-.....
 5) to produce -.....-.....-.....
 6) to equip -.....-.....-.....
 7) to complete -.....-.....-.....
 8) to invest -.....-.....-.....

XII. Перекладіть наведені нижче слова. Знайдіть в тексті і напишіть їхні синоніми.

Модель: speed (швидкість) → velocity

- | | |
|----|----------------------------------|
| 1) | investigation -.....-.....-..... |
| 2) | complicated -.....-.....-..... |
- 3) different -.....-.....-.....
 4) at present -.....-.....-.....
 5) thanks to -.....-.....-.....
 6) earlier -.....-.....-.....
 7) cost -.....-.....-.....
 8) to meet (the needs; requirements) -.....-.....-.....

Варіант 5

I. Перепишіть речення, в яких вживаються слова "it, that, one" перекладіть їх, враховуючи багатозначність і багатофункціональність цих слів.

- The new device has a number of advantages over the old one.
- It is important that this substance should remain liquid at the lowest temperatures.
- One should operate this machine carefully.
- That Mendeleev was right in his prediction is proved by the discovery of new elements.
- Hot steam is able to do work, so we may say that heat is a form of energy.

II. Перекладіть речення, позначте вертикальними рисками межу головного і підрядного.

- The method we used in our investigation is not new.
- A computer can keep all the information you introduce into its memory.
- Where it possible we should complete this task by Monday.
- Electronic computers perform calculations with the speed no human brain is capable of.
- You should take into account the rules of operating the machinery you are going to deal with.
- Have you read the paper he published in the last issue of "Power"?

III. Перепишіть і письмово перекладіть речення, враховуючи неоднозначність підкреслених слів.

- Since then several generations of complex electronic computing equipment have been developed.
- Computer, as we know, is a complex electronic device that can store and process vast quantities of information.

3. As science progresses the speed of computers operation increases.
4. The steam formed by boiling water cannot be pure dry steam as it contains the particles of unevaporated water.
5. In many ways this method is different from the ones used before.
6. It must be first determined whether the material is corrosive or not.
7. Bernoulli's theory gave the explanation of what was then known as the behavior of gases.
8. The type of fuel we select depends upon where we are going to use it.
9. The attempts to master the energy of an atom last for some decades.
10. All the information has to be analyzed before being introduced into the computer.

IV. Прочитайте наведені нижче форми інфінітива. Запишіть у стовпчик ті форми, які виражають:

- a) пасивний стан;
- b) одночасність з дією, вираженою дієсловом - присудком;
- c) такі, що передують (передування) йому.

Урахуйте, що одна і та ж форма може входити в дві групи (a "і" в " чи "a " і "c"):
to be testing; to be tested; to test; to have tested; to have been tested; to produce; to be producing; to be produced; to have been produced; to have produced; to measure; to have been measured; to be measuring; to be measured; to have measured; to be made; to make; to have made; to be making.

V. Перепишіть і письмово перекладіть речення, підкресливши в них інфінітив (двома рисками) і ті слова, що відносяться до нього, одною рисою. Укажіть в дужках функцію, яку виконує в реченні інфінітив чи інфінітивна група:

- a) підмет;
- b) частина складного присудка;
- c) означення;
- d) обставина.

1. It is necessary that the sample to be analyzed be chemically pure.
2. To change sound waves into electrical impulses, a microphone is used.
3. To read ancient mathematical tables was very difficult.
4. The first step in the design of special-purpose equipment is a detailed study of the system to be mechanized.
5. To operate the machine you must know the details of its internal construction and the mode of its operation.

VI. Перепишіть і письмово перекладіть речення, звертаючи увагу на інфінітивні звороти.

1. Radium is said to be one and half million times more radioactive than uranium.
2. The experiments have shown the instrument to be extremely reliable.
3. We believed his discovery to be much spoken about in press.
4. This type of engine is found out to have many disadvantages.
5. Everybody knows Popov to have been the first inventor of radio.
6. We wanted him to obtain better results.
7. She waited for me to come and help her.

VII. Перекладіть іменні означальні словосполучення. Запам'ятайте, що означене слово завжди стоїть у кінці такого слово-сполучення.

1. special-purpose electronic equipment;
2. computer-aided design system;
3. ship-to-shore radio communication;
4. absolutely new construction principles;
5. carefully insulated transmission lines;

6. power-station turbines.

VIII. Перепишіть і письмово перекладіть речення, в яких вживаються різні види означень.

1. Our designers look for the most convenient models of small houses.

2. Tools cutting metals should be made of very hard steel and alloys.

The details to be used in this apparatus are to be specially tested.

IX. Перепишіть текст. Уважно прочитайте його і усно перекладіть. Перекладіть 1,6,7,8-й абзаци.

The Generalized Measurement System

1. What is measurement? Fundamentally, measurement is the act or the result of a quantitative comparison between a predefined standard and an unknown magnitude. Two requirements must be met in the act of measurement: (a) the standard, which is used for comparison, must be accurately known and commonly accepted, and (b) the procedure and apparatus employed for obtaining the comparison must be provable.

2. The first requirement is that there should be an accepted standard of comparison. A weight cannot simply be heavy. It can only be proportionately as heavy as something else, namely, our standard. A comparison must be made, and unless it is made relative to something generally recognized as standard, the measurement can only have limited meaning. This holds for any quantitative measurement we may wish to make.

3. Fundamental Methods of Measurement. There are two basic methods of measurement: (a) direct comparison with either a primary or a secondary standard, and (b) indirect comparison with a standard through use of a calibrated system. Both methods are discussed in this article.

4. Direct Comparison. How do you measure the length of a cold-rolled bar? You probably use steel tape. You compare the bar's length with a standard making a direct comparison.

5. Many length measurements are made in this way. Time of day is usually determined by comparison, with a watch used as a secondary standard. The watch goes through its cycle, actually, a double cycle in synchronization with the earth's rotation. Although in this case the primary standard is available to everyone, the watch is more convenient, for it works on cloudy days, indoors, and at night. It is also more precise. It is seen, therefore, that in some cases a secondary standard is actually more useful than the primary standard.

6. The method of direct comparison, as we have seen, is not always the most accurate or indeed the best. The human senses are not equipped to make direct comparisons of all quantities with equal efficiency. In many cases they are not sensitive enough. We can make direct length comparisons using a steel rule with a preciseness of, say, 0,01 inch. Often we wish for greater accuracy, in which case we must call for additional assistance from some form of calibrated measuring system.

7. While we can do a reasonable job though direct comparisons of length, how well can we compare masses, for example? Our senses enable us to make rough comparisons. We can "heft" a pound of butter, and compare its effect with that of some unknown mass. If the unknown is about the same weight, we may be able to say that it is slightly heavier or perhaps not quite as heavy as our "standard" pound, but we could never be certain that the two masses were the same, even say within one ounce.

8. In making most engineering measurements, therefore, we require the assistance of some form of measuring system, and measurement by direct comparison is less general than is measurement by indirect comparison.

Notes

1. This holds for - це вірно для;

- X. Передивиться текст ще раз і дайте відповіді на запитання.

- XI. Знайдіть в тексті і выпишіть (а) іменники, (б) дієслова одного кореня з ними нижче словами. Перекладіть їх.

a) 1) recognition - b) 1) require -

- | | |
|----------------|----------------------|
| a) 1) result - | b) 1) to result in - |
| 2) limit - | 2) to limit - |
| 3) wish - | 3) to wish - |
| 4) watch - | 4) to watch - |
| 5) work - | 5) to work - |
| 6) effect - | 6) to effect - |

Навчальне видання

МЕТОДИЧНІ ВКАЗІВКИ
ДО ВИКОНАННЯ КОНТРОЛЬНИХ
ЗАВДАНЬ № 2, 3
З АНГЛІЙСЬКОЇ МОВИ
для студентів 1-го курсу
заочної форми навчання

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