МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ

ОДЕСЬКИЙ ДЕРЖАВНИЙ ЕКОЛОГІЧНИЙ УНІВЕРСИТЕТ

МЕТОДИЧНІ ВКАЗІВКИ

до СРС та виконання контрольної роботи №2

з дисципліни «Англійська мова»

для студентів ІІ курсу

заочної форми навчання

Напрям підготовки: ***екологія, охорона навколишнього середовища та збалансоване природокористування***

Одеса – 2015

МЕТОДИЧНІ ВКАЗІВКИ до СРС та виконання контрольної роботи № 2 з дисципліни «Англійська мова» для студентів II курсу заочної форми навчання.

Напрям підготовки: *екологія, охорона навколишнього середовища та збалансоване природокористування*

Укладач: Баєва В М. Одеса - ОДЕКУ, 2015 р., 37 с.

ПЕРЕДМОВА

Нормативна дисципліна "Англійська мова" відноситься до гуманітарного циклу освітньо-кваліфікаційного рівня бакалавр і є складовою частиною загальноосвітньої підготовки студентів ОДЕКУ. Практичне володіння англійською мовою є невід'ємним органічним компонентом сучасної підготовки спеціалістів вищими навчальними закладами. Іноземна мова у вищому навчальному закладі являє собою самостійний курс, який має свій зміст та структуру. Загальний обсяг навчального часу для II курсу за фахом екологія, охорона навколишнього середовища та збалансоване природокористування визначається робочим навчальним планом та становить 8 годин практичної та 71 годину самостійної роботи.

Мета вивчення іноземної мови у немовному вузі – підготувати студента до читання літератури за фахом, спілкування англійською мовою в різних видах мовної діяльності, можливості її використання у практичних цілях.

Загальноосвітнє значення вивчення англійської мови визначається тим, що:

- порівняння двох мовних систем - рідної та іноземної мови – поглиблює філологічні знання студента, змушує більш вдумливо ставитись до явищ рідної мови;
- вивчення іноземної мови сприяє розвитку пізнавальної та розумової активності студента;
- отримана іноземною мовою інформація містить різноманітні факти наукового суспільно-політичного та країнознавчого характеру, що допомагає студентові розширювати кругозір.

Загальноосвітня цінність вивчення іноземної мови усвідомлюється студентами за умови правильної організації зв'язків між курсом іноземної мови та спеціальними дисциплінами. У процесі навчання іноземної мови усі види мовної діяльності (читання, мовлення, аудіювання) тісно пов'язані між собою, хоча їх співвідношення на різних етапах навчання різне, що зумовлено метою та умовами навчання, а також відносною складністю видів мовної діяльності, що виконується.

Практична значимість вивчення англійської мови у вищому навчальному закладі полягає в тому, що володіння англійською мовою є:

- ознакою високого професійного та інтелектуального рівня фахівця;

- можливістю проходження виробничої практики за кордоном;
- можливістю навчання та стажування у закордонних вищих навчальних закладах;
- пріоритетним працевлаштуванням;
- необхідністю користування Internet

В результаті вивчення дисципліни "Англійська мова" студенти повинні *знати* особливості фонетичної, граматичної, морфологічної, синтаксичної структури англійської мови, відповідну спеціальну лексику за фахом.

Після вивчення дисципліни „Англійська мова" студент має *вміти*:

- читати, перекладати та реферувати оригінальну літературу за фахом для отримання необхідної інформації;
- брати участь в усному спілкуванні іноземною мовою в обсягу матеріалу, передбаченого програмою.

У процесі досягнення практичної мети здійснюються освітні та виховні завдання навчання іноземної мови.

Контроль поточних знань виконується на базі кредитно-модульної системи організації навчання. Підсумковим контролем є *залік*.

ЗМІСТ РОЗДІЛУ

Вступ

В умовах значного розширення міжнародних зв'язків України знання іноземних мов спеціалістами різних галузей науки набувають особливого значення. Одне з головних завдань яке ставиться перед студентами вищих закладів освіти України є практично - комунікативне володіння іноземною мовою на професійному та побутовому рівнях. В процесі практичного володіння іноземною мовою основний наголос робиться на усне мовлення як основну виховну форму мовленнєвої діяльності. Письмове мовлення — читанням і письмом студенти оволодівають вже на базі засвоєного усного мовлення. Усне мовлення є не тільки метою навчання, але є засобом досягнення цієї мети.

Навчання усім видам мовленнєвої діяльності ведеться комплексно. Усі відомості теоретичного характеру з фонетики* техніки читання та перекладу, граматики даються в процесі практичної роботи в об'ємі потрібному для набування студентами відповідних умінь і навичок.

Значна увага в навчальному процесі впродовж всього курсу приділяється в постановці вимови, особливо інтонації.

Граматична система іноземної мови засвоюється студентами за допомогою граматичних структур усного і письмового МОВЛЄННЯ. Порядок подання граматичних структур визначається послідовністю поступового ускладнення матеріалу і залежності його від попереднього матеріалу.

Лексика - слова, словосполучення і вирази засвоюються в мовленні в їх природному матеріалі.

Вільне спілкування іноземною мовою можливо лише коли студенти будуть мислити цією мовою. Тому розвиток мислення іноземною мовою є важливим завданням практичного курсу, що забезпечується численними, різноманітними мовними оригінальними вправами і створення мовної атмосфери на заняттях поза аудиторний час.

Знання:

- вимови усіх звуків англійської мови на рівні комунікативної достатності (рівень розбірливості для усного спілкування) та основними інтонаційними моделями;
- закономірностей англійської мови у співставленні її з діловою українською мовою;

- фонетичного, граматичного, лексичного, морфологічного, синтаксичного мінімуму передбаченого програмою кафедри іноземних мов ОДЕКУ з англійської мови.

Вміння:

- вести бесіду на основі типових ситуацій ділового спілкування, у зв'язку з прочитаним або прослуханим;
- робити повідомлення на основі типових ситуацій ділового спілкування, а також висловлюватися з приводу прочитаного або прослуханого;
- самостійно читати (зі словником) суспільно-політичні, науково-популярні тексти, а також за фахову літературу;
- сприймати на слух при безпосередньому спілкуванні та у звукозапису тексти побудовані в основному на засвоєному мовному матеріалі.

Структура дисципліни „Англійська мова". Розподіл граматичного і лексичного матеріалу в межах семестру, кількості годин, які необхідні для засвоєння певних граматичних і лексичних тем студентами заочного відділення II курсу, визначається кафедрою іноземних мов у робочих навчальних планах на основі програми з іноземних мов. Вивчення курсу розраховане на 79 годин, із них 8 годин аудиторних занять, 71 годину на самостійну роботу студентів.

Для виконання контрольних робіт треба вивчити такі теми II курсу заочної форми навчання:

1. Особливості умовних речень в англійській мові (I, II, III типів речень).
2. Інфінітив та дієприкметник, їх складні форми.
3. Звороти, які рівнозначні додатковим реченням: об'єктний інфінітивний,
   уб'єктний інфінітивний, незалежний (самостійний дієприкметниковий зворот).
4. Граматичні функції дієслів *should* і *would.*
5. Звороти з інфінітивом, дієприкметником і герундієм, які рівнозначні реченням додатковим Різні значення слів: ***only,*** *both ...and, eith er... or, neither...nor, as.* Самостійний переклад суспільно-політичного тексту -- 5.000 друкованих знаків.
6. Різні значення слів: *because of, or, since, due, provided*.

Самостійний переклад суспільно-політичного тексту -- 10.000 друкованих знаків; самостійний переклад тексту за фахом – 10.000 друкованих знаків.

ОРГАНІЗАЦІЯ ПОТОЧНОГО ТА ПІДСУМКОВОГО КОНТРОЛЮ ЗНАНЬ

Поточна та підсумкова оцінка знань студентів здійснюється за модульно-накопичувальною системою. Максимальна сума балів, яку може набрати студент II курсу, складає 100 балів, з них за міжсесійну контрольну роботу - 80 балів (КР-2) за аудиторну роботу при проведенні занять протягом сесії - 20 балів.

Контрольна робота складається з 10 завдань. Кожне завдання оцінюється кількістю в залежності від його складності: 1завдання – 5 балів; 2 завдання – 5 балів; 3 завдання – 6 балів; 4 завдання – 6 балів; 5 завдання – 11 балів, 6 завдання – 12 балів, 7 завдання – 13 балів, 8 балів – 8 балів, 9 завдання – 8 балів, 10 завдання – 6 завдання. Усього – 80 балів. Вона зараховується, якщо студент отримав не менше ніж 40 балів. (50%)

Накопичена підсумкова оцінка ***(ПО)*** (засвоєння студентом заочної форми навчання навчальної дисципліни) розраховується для дисциплін, що закінчується заліком за:

ПО = 0,5 (ОЗЕ + ОМ),

де:

ОЗЕ - кількісна оцінка (у відсотках від максимально можливої) заходів контролю СРС під час проведення аудиторних занять;

ОМ - кількісна оцінка (у відсотках гід максимально можливої) заходів контролю СРС у міжсесійний період.

Підсумковим контролем є залік, який полягає в оцінці засвоєння студентом навчального матеріалу (вмінь та навичок) виключно на підставі кількісної оцінки результатів виконання ними видів робіт на аудиторних заняттях, передбачених робочою навчальною програмою дисципліни та за умови виконання міжсесійної контрольної роботи та аудиторного опитування **не менше ніж на 60%** за кожен з видів занять.

Шкала переходу від оцінки поточного

контролю до підсумкової оцінки

Інтегральна сума балів	Якісна оцінка з заліку
<60% від максим. можливої	не зараховано
>60% від максим. можливої	зараховано

ОРГАНІЗАЦІЯ ПРАКТИЧНИХ ЗАНЯТЬ

Після практичних модулів студенти повинні оволодіти наступними базовими *вміннями та знаннями:*

- охарактеризувати умовний спосіб в англійській мові;
- пояснити структуру та особливості вживання трьох типів речень в умовному способі;
- пояснити вживання інфінітива та його форм в англійській мові;
- пояснити вживання дієприкметникових зворотів в англійській мові;
- читати, перекладати та переказувати тексти суспільно-політичної тематики;
- читати, перекладати та переказувати тексти за фахом.

КОНТРОЛЬНА РОБОТА №2

ВАРІАНТ №1

I. Перепишіть та письмово перекладіть текст А:

By 2050, world population is expected to exceed 9 billion people, up from 6.5 billion today. Already, according to the report, a gap is emerging between agricultural production and demand, and the disconnect is expected to be amplified by climate change, increasing demand for biofuels, and a growing scarcity of water.

There will come a point in time when we will have difficulties feeding world population. Although unchecked population growth will put severe strains on global agriculture, demand can be met by a combination of expanding agriculture to now marginal or unused land, substituting new types of crops, and technology. The solution is only going to come about by changing the way we use land, changing the things that we grow and changing the way that we grow them.

Agricultural research and technological development in the United States and Europe have increased notably in the last decade, but those advances have not translated into increased production on a global scale. Subsistence farmers in developing nations, in particular, have benefited little from such developments and investments in those agricultural sectors have been marginal, at best. The leading specialists in this field identify a number of strategies to increase global agricultural productions in sustainable ways, including:

- Improvements in irrigation, fertilization and agricultural equipment using technologies ranging from geographic information systems and global analytical maps to the development of precision, high performance equipment.
- Applying sophisticated management and technologies on a global scale, essentially extending research and investment into developing regions of the world.
- Investing in "farmer competence" to take full advantage of new technologies through education and extension services, including investing private capital in better training farmers.
- Intensifying yield using new technologies, including genetically modified crops.
- Increasing the amount of land under cultivation without expanding to forested lands through the use of multiple cropping, improving degraded

crop and pasturelands, and converting productive pastures to biofuel production.

What is required to meet the challenge of feeding a growing population in a warming world is to boost yield through highly sophisticated land management with precision irrigation and fertilization methods. Farmers, markets and governments will have to look at a host of options including increased irrigation, mechanization, fertilization and the potential benefits of biotech crops.

II. Складіть 10 спеціальних запитань до тексту.

III. Перепишіть та письмово перекладіть 1 абзац тексту B; Складіть 5 запитань до 2 абзацу тексту B:

1. To create solutions for climate change, we must understand the nature and causes of the problems. Climate change is nature's 'wake-up call' to humanity, because we cannot continue in the manner we have been doing for the last 200 years. The main cause of climate change is the problems caused by the burning of fossil fuels: 90% of energy in Great Britain is derived from fossil fuels. A problem in the Southern hemisphere is the burning of tropical and other forests. The problems of lifestyle, especially over-consumption in countries in the North, is both an unsustainable present and future. At present, 20% of the world's population uses 80% of the world's resources. Such inequality cannot continue.

   Moving to a carbon-free future requires a revolution as profound as the industrial revolution that created the problems we face now. There are no environmental solutions to environmental problems. There are only political, economic and social solutions because the causes of environmental problems are political, economic and social by nature. Solutions lie in the political, economic and social spheres.

   Categories of solutions are technical, infrastructure, management or personal choice.
2. Renewable energy resources are part of the technical solution. Renewable energy resources could provide most of Britain's energy in the long-term, are home grown, involve less risk and pollution and are popular. Offshore wind could be the first such technology to be backed and has a near commercial

potential of £6 billion in this country. Solar power could be used in both offices and in homes.

Environmental problems are particularly insidious because they develop slowly. Research on human perception suggests that sensory changes (visual, auditory, tactile, gustatory) that occur slowly are difficult to detect. As long as the change occurs slowly, we adapt to the surroundings, and are unlikely to detect a change. From one day to the next, we notice little (if any) change in the natural world around us, or even changes in our lifestyles.

IV. Перепишіть та письмово перекладіть на українську мову, звертаючи увагу на переклад інфінітива та інфінітивних зворотів:

1. The current situation and rates of demographic growth need to be taken into account.
2. The need to preserve certain natural resources has been recognized by various human societies far much longer than is generally supposed.
3. To inhale ozone-rich air is not much better than drinking off a glass of acid.
4. Studies are supposed to be carried out for a specific company, market sector, region or activity.
5. Man seems to be at constant war with nature and thinks that he can absolutely control it.
6. Acid rains are supposed to be caused by a high level of air pollution by sulphur dioxide.
7. Oxygen is known to keep marine organisms alive and also to sustain species reproduction and vigor.
8. It makes sense for the country to reduce consumption of fossil fuels and explore alternative energy sources.
9. It’s high time for us to speak strongly against the slaughts made by man on nature.
10. Since the early nineteen-seventies, the country has had basic laws that are intended to eliminate air and water pollution and rid the environment of toxic chemicals and agricultural and urban wastes.

V. Перепишіть та письмово перекладіть речення на українську мову, звертаючи увагу на відмінність у перекладі залежного та незалежного дієприкметникових зворотів:

1. Having been supplied with necessary equipment and data, the scientists could assess the results of previous floods in this region to predict the future flood events.
2. Being situated on the coast such cities as Sydney and San Francisco may have possible effects of climate change by the year 2050 arising from a range of greenhouse gas emissions.
3. A great deal of research work in different fields having been done, the specialists could analyze the data and name reasons of the global climate changes.
4. A summary report describing global climate change was supplemented with further reports containing specific information for big cities, their number including coastal cities such as Sydney and San Francisco.
5. Squeezed by the ice, the steamer could not continue its way.
6. There is a quota for caviar obtained from valuable species.
7. Radioactivity is trapped in scale caked inside pipes, causing the pipes to become radioactive.
8. The nature of the ground being, as a rule, uniform, we did not use the lead while approaching the nearest port.
9. The bed of the sea being hidden from view, its form can only be determined by systematic soundings.
10. The report being illustrated by the detailed bathymetric chart of the Antarctic region, we were greatly interested in it.

VI. Перепишіть та перекладіть на українську мову речення, які мають підрядні умовні речення:

1. If the work on the project continued, its data would be extremely important in different fields of man's activity.
2. If the government had paid more attention to the problem of water consumption in time, some regions wouldn't have suffered from drinking water shortage during the arid summer period.
3. If the scientists didn't think of the reasons of climate change, the future scenarios would sound more dramatic.
4. If this scientist hadn't taken part in the work of international organizations, he wouldn't have made such a detailed report on the problem of water resources management to the Ministry.

5. If the salinity and the fall of sea-water temperature are known, it will be possible to predict to fifteen days ahead the date on which water of given salinity will freeze.
6. Had it rained without a break for two hours, it should have been described as “continuous rain”.
7. Unless one carried out a great number of observations, it would be extremely difficult to come to a certain conclusion concerning the factors influencing the weather.
8. You will get right ecological predictions if you apply this method of calculation.
9. Most rivers would have dried if they had depended only on precipitation.

VII. Перепишіть та письмово перекладіть нижче наведені речення, звертаючи увагу на *–ing* форми:

1. Icing was encountered in about one half of the cloud masses both at 700 mb and at 500 mb.
2. Having reached the earth, the precipitated water begins to accumulate additional impurities, both soluble and insoluble.
3. With the weather being windy, we didn’t risk to cross the river.
4. When freezing water expands by about one-tenth of its volume.
5. The substance being heated, the motion of the molecules increases.
6. They made a more accurate survey by using new instruments and by improving the former methods of work.
7. The ecologists began surveying this area a month ago.
8. Describing new methods of calculation is very useful for the practical work.
9. Cartographers ensure safe navigation by compiling accurate charts.
10. The Gulf Stream bringing masses of warm water to the shores of Norway, the climate of this country is rather mild.

VIII. Перепишіть та письмово перекладіть на українську мову наведені нижче речення, звертаючи увагу на різні значення дієслів *should, would*:

1. Most people would pay more for better health care.
2. The level which would prevent dangerous interference, or indeed the way in which this level could be defined, have not been yet found.
3. People should have started thinking of careful attitude to nature much earlier.
4. Once we decide what degree of temperature rise the world can tolerate, we then have to estimate what greenhouse gas concentrations in the atmosphere should be limited to, and how quickly they should be allowed to change.
5. Many of the modern achievements in ecology would be quite impossible without computers.
6. If there were no water cycle, there would be no rains.
7. We should determine the correlation between the seasonal change of planktonic population and the dissolved oxygen in the same area.
8. Laboratory experiments should be followed by field experiments of different placer.
9. In this case the barometer must continuously be watched and its readings would be regularly recorded.
10. Meteorologist proved that air mass would have characteristics and properties quite different from those of such air mass in winter.

IX. Перепишіть та перекладіть на українську мову речення, звертаючи увагу на різні значення виділених слів:

1. We can also investigate both impacts of relatively gradual change and their associated costs to seek ways of defining a dangerous change.
2. Once a “tolerable” (i.e. non-dangerous) change has been determined, wen then have to calculate what this corresponds to in terms of tolerable greenhouse gas concentrations in the atmosphere.
3. This booklet attempts neither to come up with an answer to any of these questions, nor illustrates any of the wide range of research being undertaken at the Hadley Centre.
4. Ocean provides a “biological sink” as carbon dioxide is absorbed by phytoplankton and higher life forms.
5. The vertical thickness of the fog is so great that it is impossible to tell whether there is cloud above it.
6. Neither of these investigations proved to be satisfactory.

7. In order to study the diurnal variations of magnetic disturbance we must take into consideration the results of a great number of observation.
8. Due to this reduction the mean annual diurnal variation of disturbance in the bay was found to have two distinct maxima.
9. The mixing can either be lateral or vertical.
10. Owing to the readings taken at regular intervals we could draw the following conclusion.

X. Перекладіть 10 тис. зн. суспільно-політичного тексту.

XI. Перекладіть 10 тис. зн. тексту за фаховою тематикою.

КОНТРОЛЬНА РОБОТА №2

ВАРІАНТ №2

I. Перепишіть та письмово перекладіть текст А:

Scientists have shown that using mud from waste water treatment plants as a partial alternative fuel can enable cement factories to reduce their CO2 emissions and comply with the Kyoto Protocol, as well as posing no risk to human health and being profitable. These are the results of an environmental impact assessment.

Dependency on oil and coal could be coming to an end. Researchers from the Rovira i Virgili University (URV) have analysed the environmental and human health impacts of an alternative fuel that solves various problems simultaneously. This is the solid waste from the water treatment plants of large cities.

The scientists have carried out the first study into this method at a cement plant in Vallcarca (Catalonia), which has been producing cement for more than 100 years, and they confirm in the latest issue of the journal Environmental

Science and Pollution Research that it is “the best option for getting rid of mud that would have had to be dumped elsewhere, while also powering the plant”. “As this mud is already waste, burning it does not enter into the atmospheric CO2 emissions assigned to each country under the Kyoto Protocol”, lead author of the study and director of the Toxicology and Environmental Health Laboratory tells.

This would enable plants producing cement, one of the most contaminating industries in terms of CO2 as well as emissions of dioxins, furans and heavy metals, to consume energy in a more environmentally-friendly way. Up to 20% of the fossil fuel energy used at the Catalan plant has now been substituted for the fuel from waste water treatment plant mud.

From an economic point of view, the scientists will not say that cement plants could increase their profits by using this method, but “they will not have to pay anything to exceed their agreed emissions”, the researcher points out. The economic benefits of this system also depend on the price of fuel. One of the most important issues for scientists is the reduction in environmental impact, and consequently the health risks for people living near the plants. The experiment with the mud has led to a 140,000 tonne reduction in CO2 emissions between 2003 and 2006, and will have limited the potential deaths from exposure to chemical pollutants. In addition, the study shows that using this green fuel would reduce the cancer rate by 4.56 per million inhabitants.

The researchers say it is essential to carry out separate studies for each plant. If the conditions are right for each of them, using mud from wastewater treatment plants in cement factories is a very good solution then.

II. Складіть 10 спеціальних запитань до тексту А.

III. Перепишіть та письмово перекладіть 1 абзац тексту В; Складіть 5 запитань до 2 абзацу тексту В:

1. The effects of buildings on our climate

There are around 25 million dwellings in Britain and they consume three times more energy than all our cars. Of those more than 18 million were built

before 1980, therefore before the impacts we are having on the climate were widely acknowledged.

Modern, small, semi-detached and terraced houses tend to be more energy efficient than older, larger detached houses. Houses with cavity walls and roof spaces have an advantage over the nearly seven million with solid walls. If no action is taken to mitigate current trends in energy consumption the amount of terawatt hours (TWh) a year our homes consume could rise by 21% over the next decade. The average household currently consumes around 3880 kWh per year on electricity alone.

Up to 90% of the UK population are estimated to reside within urban or sub-urban areas. The collection of buildings and other structures in these urban areas result in significant changes to the local climate. The most apparent expression of this is commonly known as the urban heat island effect, where towns and cities are measurably warmer than surrounding rural areas, particularly at night. This increased thermal stress can put additional strain on people, materials, and buildings.

Our climate scientists are currently working with building scientists to assess how urban climates might change in the future and provide a tool that planners and architects can use to assess how this will affect their choice of materials, techniques, and even designs.

By designing our buildings and neighbourhoods appropriately we have the capacity to influence both global climate change, and the immediate climates we experience within our cities, towns, and neighbourhoods.

2. Climate change and aerosols

Atmospheric aerosols are microscopic particles suspended in the Earth's atmosphere, which generally act to cool the climate by reflecting sunlight back to Space and also by affecting clouds. The net impact of human activities, including greenhouse gases and aerosols, has been to warm the world's climate.

The Earth's atmosphere is made up of a number of components. These include gases such as nitrogen, oxygen and water vapour, and also atmospheric aerosols. Atmospheric aerosols are microscopic particles that are emitted from human and natural sources. The aerosols become suspended in the atmosphere. Human sources of aerosols include industrial aerosols from emissions of gases such as sulphur and nitrogen oxides, as well as direct emissions of smoke and soot from fossil-fuel and biomass burning.

Human activities have increased concentrations of atmospheric aerosols, which have led to an associated cooling of climate. This cooling acts to counterbalance some of the warming due to increased concentrations of greenhouse gases which are also caused by human activities.

A common misconception about aerosols is that they come from spray canisters, used for products such as deodorant, and that they damage the ozone layer. In the past the gases used as propellants in spray cans were damaging to the ozone layer, but not the aerosol particles themselves. Under the Montreal Protocol, these propellants have been replaced by non-ozone depleting substitutes. However, these gas replacements are greenhouse gases and add a small component to the global warming problem.

IV. Перепишіть та письмово перекладіть на українську мову, звертаючи увагу на переклад інфінітива та інфінітивних зворотів:

1. The scientists believe their report to be used to prepare different sectors of economics for the impact of climate change.
2. The report concluded the climate change in this region to have been the result of the imbalanced approach to nature in the past.
3. The latest report is announced to provide the most detailed picture we have ever had of how the whole region's climate will change.
4. Many industries, including farming, fisheries, transport and water and flood management are considered to benefit from the knowledge of climate change and its consequences.
5. To discuss the general question of environment protection, we read several articles concerning this subject.
6. In order to study the diurnal variations of magnetic disturbance we must take into consideration the results of a great number of observations.
7. Some of the oscillating currents appear to be ordinary tidal currents.
8. There are large numbers of observations to be corrected.
9. A synoptic picture of the actual currents can be expected to be highly complicated.
10. Steps have been taken to develop renewable and nonpolluting sources of energy.

V. Перепишіть та письмово перекладіть речення на українську мову, звертаючи увагу на відмінність у перекладі залежного та незалежного дієприкметникових зворотів:

1. Having discovered weather-sensitive areas all around the world, the specialists can carry out some studies aimed at helping in planning construction and people activities in these regions.
2. A bridge between climate change science and impact studies in collaboration with other organizations having been made, the right planning and resource management strategies were available to different industrial companies.
3. Some organizations were provided with a number of services to help identify the risks and opportunities presented by climate change, the values of these services being estimated very high by these organizations.
4. Several warnings about the possible flood having been received, the people of the given region could avoid big damage.
5. Winter in this region is very severe, its mean temperature being 25o below zero.
6. The diurnal variation of relative humidity is determined by absolute humidity and temperature, the latter being controlling factor.
7. Having plotted the apparent path of the storm it should be obvious in which semi-circle the ship is situated.
8. Other conditions being equal, it is easier to draw isobars in areas where the winds are strong.
9. Applying this method, we see that isallobaric gradient is very slight.
10. The Mediterranean body of water can be divided into several smaller ones, each of which has its specific characteristics, the most outstanding being the waters of the Black Sea.

VI. Перепишіть та перекладіть на українську мову речення, які мають підрядні умовні речення:

1. If the Greenland ice sheet which contains nearly three million cubic kilometers of ice were to melt, sea level around the world would rise by about 7 meters.

2. If about half the carbon dioxide emitted by fossil fuel burning were not absorbed by natural ‘sinks’ in ecosystems and the oceans, climate would already be changing faster than it is.
3. If the progressive scientists in the world hadn’t started informing the society of the harm of imbalanced approaches to nature, people wouldn’t have started thinking of careful use of natural resources.
4. If this group of specialists had had enough time during the conference last month, they would have discussed more serious items with their colleagues from other countries.
5. If the quantitative effect of the bottom topography is to be examined, it isb necessary to consider the equation of continuity and the equation of stationary motion.
6. Were the composition of sea water determined, we should be able to make certain conclusions concerning the amount of magnesium in it.
7. If the calculations are correct, the heat weather in Europe would be greater the warmer the Gulf Stream is.
8. You have to increase the number of observations, provided you cross a certain current and wish to know the limits of it.
9. Ice conditions would be better, if the air temperatures were higher than usual.
10. Unless weather reconnaissance flights were in continuous progress from March 1947, no other ice islands would be discovered.

VII. Перепишіть та письмово перекладіть нижче наведені речення, звертаючи увагу на –*ing* форми:

1. The flow of harmful substances originating from many sources, including then atmosphere, water, wastes and fertilizers is directed into the soil.
2. Physical degradation of soil is a result of a number of factors, the most obvious being the mechanization of agriculture.
3. Accompanying the continuing degradation is a decline and eventually a complete loss of the detoxification properties of the soil.
4. The annual variation of temperature due to processes of heating and cooling is known at all depths.
5. Maintaining a vessel at anchor for a long time is expensive.
6. The forces acting on the water of the sea may be divided into two general classes: internal and external.

7. The Mediterranean waters can be divided into several smaller ones, the most outstanding being the waters of the Black Sea.
8. Most continents are surrounded by a shelf extending out for a considerable distance.
9. On the Atlantic coast of the USA the tide is of the semidiurnal type, the diurnal components being small.
10. In establishing this theorem turbulence and friction forces were neglected.

VIII. Перепишіть та письмово перекладіть на українську мову наведені нижче речення, звертаючи увагу на різні значення дієслів *should, would*:

1. We need to calculate what future emissions would be allowable in order to keep concentrations at tolerable levels.
2. The UN Framework Convection on Climate Change has as its ultimate objective to achieve stabilization of greenhouse gas concentrations in the atmosphere at a level which would prevent dangerous anthropogenic interference with the climate system.
3. The significant increase in the earth's temperature over the next several degrees would entail major ecological, economic and social consequences.
4. The emissions of the gases into the atmosphere should be monitored carefully and probably should be reduced considerably in order to prevent serious harm to human welfare.
5. Should the chart be more complete we should not make more soundings in this area.
6. If the height of the eye were 40 feet, we should see the light at a distance of 24 miles.
7. The liquid manure should contain at least 8% of dry matter, but it actually seldom contains more than 2%.
8. It should be pointed out the problem is not so simple as it appeared at the very beginning.
9. The results of previous research would indicate the presence of gas traces in the atmosphere.

IX. Перепишіть та перекладіть на українську мову речення, звертаючи увагу на різні значення виділених слів:

1. The article both shows possible results of rapid changes in components of the climate system and discusses some of the uncertainties in deducing tolerable concentrations and emissions, and how these might be managed.
2. A warm ocean can absorb less CO2 and, as surface water saturate, the ocean carbon sink will weaken if the circulation does not transport the carbon to depth.
3. The net effect is predicted to be reduction in uptake due to climate change, leaving more CO2 in the atmosphere.
4. Some models showed that once Greenland begins to melt, it would not be possible to ever regrow it to its present size, even if CO2 was reduced to preindustrial concentrations.
5. Whether this value is exact or not is a matter of minor importance.
6. The vertical thickness of the fog is so great that it is impossible to tell whether there is cloud above it.
7. Over the open sea the wind blows at nearly the same speed both day and night provided the pressure gradient remains unaltered.
8. It is easier to predict the movement of a pronounced wind than that of a weak one.
9. The amount of evaporation from either land or water surface during a storm is negligible because of high relative humidity.
10. Hydroelectric stations generate electrical power for industry as well as for everyday life needs.

X. Переклад 10 тис. зн. суспільно-політичного тексту.

XI. Перекладіть 10 тис. зн. тексту за фаховою тематикою.

КОНТРОЛЬНА РОБОТА №2

ВАРІАНТ №3

I. Перепишіть та письмово перекладіть текст А:

Physical chemists have created a new, cheap test to detect mercury, an element known to harm the brain, kidneys, heart, lungs and immune system. A gold nanorod absorbs mercury from a sample and, then and an optical spectrometer measures changes in the nanorod's light absorption. The process, which takes less than 10 minutes, can test mercury concentrations in liquids, gases, or solids.

Mercury is in the ground, in the air, and in our water! We even have a little bit in our bodies. That's normal. But too much mercury could cause health problems. What's in your water? According to chemist Andres Campiglia, mercury attacks the nervous system. Too much mercury in your body can cause injury to your brain, kidneys, heart, lungs and immune system.

University of Central Florida chemists have created a new quick, cheap test to detect mercury by using a very unlikely source -- pure gold. Water is mixed with a solution containing gold nanorods, or solid gold bars 2,000 times smaller than the width of a human hair. Gold absorbs mercury. Then, scientists use an optical spectrometer to measure the light soaked up by the nanorods and reveal how much mercury is present. The more reddish it becomes, the higher the concentration of mercury.

The entire process takes less than 10 minutes. Results read out on a computer. This mercury test works on not only liquids, but also on gases and solids. Scientists believe it can also be used in a larger capacity to clean up water and power plants. It could be available to the public within a few years.

BACKGROUND: Chemists are using an unusual technique to detect mercury in your water: gold nanorods, two thousand times thinner than a human hair. The gold absorbs the mercury while the researchers monitor changes in the amount of light through a hand-held device called an optical spectrometer. This process can be used to create water filters and reclaim contaminated water.

HOW MERCURY GETS INTO WATER: Mercury is found in many rocks including coal, which when burned, releases mercury into the environment. Coal-burning power plants are the largest human-caused source of mercury emissions to the air, accounting for over 40 percent of all domestic human caused mercury emissions. The EPA has estimated that about one quarter of U.S. emissions from coal-burning power plants are deposited within the U.S. Burning hazardous wastes, producing chlorine, breaking mercury products, and spilling mercury, as well as the improper treatment and disposal of products or wastes containing mercury, can also release it into the environment. Current estimates are that less than half of all mercury within the U.S. comes from U.S. sources. Mercury in the air eventually settles into water or onto land where it can be washed into water.

II. Складіть 10 спеціальних запитань до тексту А.

III. Перепишіть та письмово перекладіть 1 абзац тексту В; Складіть 5 запитань до 2 абзацу тексту В:

First Successful Use Of New Ocean Observation Technology – Investigation Of Ocean Acidification In The Baltic Sea

1. For the first time scientists and technicians from the Leibniz Institute of Marine Sciences (IFM-GEOMAR) in Kiel, Germany, successfully used an offshore observing system to study environmental changes in the oceans.

   The so-called mesocosms resemble oversized test tubes with a length of 20 metres. They are used to simulate the future ocean in situ, i.e. under realistic conditions. IFM-GEOMAR scientists used six of these mesocosms, each encompassing about 60,000 litres of sea water, at the observing station in the Baltic Sea in order to study the effects of ocean acidification.

   Above the sea surface they seem unimpressive: six vertical orange sticks connected by a transparent plastic roof. The dimension of these devices which were installed in the western Baltic Sea is revealed under water. A 20 metre long, flexible plastic tube is affixed on a rack that serves for buoyancy and stability of the system. In this tube scientists can isolate about 60 cube metres of seawater under natural conditions in terms of temperature, stratification and ecosystem.

   "So far we had studied the impact of changes such as the increase of fertilizers or of the carbon dioxide concentrations in small tanks in the laboratory. The new mesocosms enable us to study the developments under natural and controlled conditions Thus, we can better estimate their impact on the ecosystem," states project leader. The first mission of the mesocosms, a technology developed at IFMGEOMAR, was dedicated to research on the impact of ocean acidification. The ocean absorbs more than a third of the carbon dioxide produced by human beings. As a consequence the pH-value decreases and the ocean acidificates. Many marine scientists regard this process as equally dangerous as the ocean warming. The researchers want to know how the impact of the acidification on the marine

ecosystem looks like. A final assessment of the experiments cannot be given yet. But the experiments were considered very successful since a large amount of data was generated.

1. The study was conducted together with partners of the Alfred Wegener Institute for Polar and Marine Research in Bremerhaven, the Leibniz Institute for Baltic Sea Research in Warnemünde, the Leibniz Institute of Freshwater Ecology and Inland Fisheries in Berlin and 19 students from Kiel. It is part of the joint project SOPRAN (Surface Ocean Processes in the Anthropocene) funded by the Federal Ministry of Education and Research that has also partfinanced the development of the worldwide unique mesocosm systems. International parties from the USA and the UK have already expressed interest in the new technology.
   The experiment in the Baltic Sea was a test for a large-scale project which will take place off the coast of Svalbard in spring 2010 under the leadership of IFM-GEOMAR with contributions of 15 other European partners in the context of the European project EPOCA (European Project on Ocean Acidification). The main focus will be again the ocean acidification. A decision on proposals seeking for funding of additional mesocosm experiments in the context of SOPRAN is expected soon.

IV. Перепишіть та письмово перекладіть на українську мову, звертаючи увагу на переклад інфінітивна та інфінітивних зворотів:

1. Leading companies in the UK nuclear power industry expect this organization to give expert advice on predicated climate change at specific sites.
2. Some specialists consider the awareness of potential changes in temperature and precipitation as well as possible changes to sea level and extreme weather events such as typhoons to be very necessary in people activities planning.
3. The aim of the report was known to identify the potential impact of extreme weather events on economics of different countries.
4. Extreme weather events are likely to happen much more often in the next few decades because of the rapid climate changes all over the planet.
5. To supply the ecologists with accurate charts is a very important kind of work.
6. This ecologist is to make a report about the results of the last expedition he took part in.

7. The harbour to be surveyed is surrounded by mountains.
8. Every surveyer knows a preliminary survey to be not accurate.
9. The deep-water circulation of the Atlantic appears to represent a superposition of two types of circulation.
10. A synoptic picture of the actual currents can be expected to be highly complicated.

V. Перепишіть та письмово перекладіть речення на українську мову, звертаючи увагу на відмінність у перекладі залежного та незалежного дієприкметникових зворотів:

1. Scientific principles of development and functioning of the climate monitoring system having been developed, the organizations can have all the information they need in planning their prospects.
2. Principle climate forming factors having been identified and climate regime of Ukraine having been studied, geographical zoning could be developed more thoroughly.
3. The preliminary scenario of possible regional climate change was developed, its effects being expected in the next 20 – 100 years .
4. Having made a conclusion about the considerable decrease of the Dnipro River water content, water resource shortage can be avoided only by changing the control regime for the Dnipro's reservoir system.
5. The velocity of flowing water depends upon the slope and character of its channel.
6. With the weather being windy, the exploirers didn’t risk to cross the river.
7. Fog is water evenly distributed through air in minute particles.
8. The diurnal variation of relative humidity is determined by absolute humidity and temperature, the latter being the controlling factor.
9. Considering the atmosphere, we find that unstable conditions occur every day and every hour.

VI. Перепишіть та перекладіть на українську мову речення, які мають підрядні умовні речення:

1. If an increase from rain, rivers or melting ice overlaid salty ocean water inn Gulf Stream, the UK annual temperature would cool by up to 5ºC in a matter of a decade or two, as the Hadley Center computer model shows.
2. If the daily minimum temperatures in central England regularly felt below - 10ºC, the disruption to the agriculture, transport and other infrastructure would be enormous.
3. If the flooding forecast had been made in time, some regions wouldn't have suffered as much from high water levels.
4. If the Met Office hadn't provided consultancy, equipment specification and training for the meteorological service in this country, the institutions responsible for flood warning wouldn't have made the first-class warning of severe weather.
5. If the slope is covered with snow or ice the descending air is strongly cooled and may attain a considerable speed.
6. Were it not for the protective ozone layers, life upon the earth might have been impossible.
7. Invisible water vapour may become visible, provided it is transformed into clouds, rain, hail, snow, sleet, dew or frost.
8. The vertical movements of the atmosphere usually pass unnoticed by most people, unless these movements are specially vigorous.
9. Had they seen you yesterday, they would have certainly told you about our plans.
10. If the dew point passed, condensation would begin.

VII. Перепишіть та письмово перекладіть нижче наведені речення, звертаючи увагу на – *ing* форми:

1. In discussing the process of evaporation it is more rational to consider not the vapour pressure but the specific humidity.
2. The drawing of the isobars will do much to assist in finding the exact position of the front.
3. Environmental protection is a task requiring joint effects of government agencies and public organizations.
4. The ultimate environmental problem may be the so-called greenhouse effect, resulting from increased levels of carbon dioxide in the atmosphere.

5. These are the formulas used in computing both the average total cloudiness and the average cloudiness in particular atmospheric layers.
6. An attempt to improve hurricane forecasting by using two or three levels in combination has not been very successful.
7. People have upset nature's sensitive equilibrium releasing harmful substances into the air, polluting rivers and oceans with industrial waste.
8. The forests in Amazonia, South-East Asia and West and Central Africa are being destroyed at an alarming rate of 42 million acres per year.
9. The first concern on acid deposits started speaking in the seventies when the Scandinavian countries began recording an increasing acidification of their lakes.
10. The data being sent by the sputnik are compared with the data beingcollected by ground observers.

VIII. Перепишіть та письмово перекладіть на українську мову наведені нижче речення, звертаючи увагу на різні значення дієслів *should, would:*

1. The next stage is to calculate what emissions of greenhouse gases would be allowable in order to keep below the dangerous limit of greenhouse gas concentrations.
2. The model projects that the Gulf Stream would slow down by about 20% by the middle of the country, but by no means completely switch off.
3. The emissions of the gases into the atmosphere should be monitored carefully and probably should be reduced considerably in order to prevent serious harm to human welfare.
4. Immediate measures to slow down the buildup of greenhouse gases would reduce the warming and its undesirable consequences.
5. Priority should be given to detailed studies of the sources of these gases, their interactions in the atmosphere.
6. Increased ultra-violet radiation levels would also damage algae and aquatic ecosystems, perhaps leading to declines in fish stocks.
7. We should now try to determine the position and the properties of the air mass that is going to pass over the forecasting district during the forecasting period.
8. Another consequence of global warming would be a higher sea level.
9. The ecologists said that several depressed oxygen levels would kill life forms and eliminate their habitat.

10. It should be mentioned that fog isn't only saturated air but air which contains an amount of liquid water sufficient to reduce the visibility to 1000 meters or less.

IX. Перепишіть та перекладіть на українську мову речення, звертаючи увагу на різні значення виділених слів:

1. This contribution from Greenland would be in addition to sea-level rise due to thermal expansion of the oceans.
2. Using only natural factors such as internal "chaos" and solar and volcanic changes, we were not able to reproduce this change with the Hadley Centre model.
3. The panel shows change in temperature for both the summer mean and the extreme hottest day.
4. Because this can be difficult to do off-line (that is, with climate scenarios feeding onto separate impacts models), modelers at the Hadley Centre are starting to build impact models into the coupled climate model.
5. As far as the ground water resources are concerned it will be necessary to regulate the update of water.

X. Перекладіть 10 тис. зн. суспільно-політичного тексту.

XI. Перекладіть 10 тис. зн. тексту за фаховою тематикою.

КОНТРОЛЬНА РОБОТА №2

ВАРІАНТ №4

I. Перепишіть та письмово перекладіть текст А:

The city of the future is currently being constructed on the outskirts of Abu Dhabi. Masdar City shall be supplied exclusively with renewable energy and produce neither carbon dioxide nor waste.

The Fraunhofer Gesellschaft and the Abu Dhabi Future Energy Company, representing the Masdar City Project, signed a cooperative agreement for a strategic partnership. Over the long term the goal is to establish a close cooperation in the field of sustainable urban development and building planning. Participating in the cooperation are the Fraunhofer Institutes for Industrial Engineering IAO and for Building Physics IBP as well as the Fraunhofer Institute for Solar Energy Systems ISE.

Masdar City is to be constructed on an area of approximately 6 square kilometres, located about 30 kilometres east of the capital Abu Dhabi. It is designed to support a population of about 50,000. The planned carbon-neutral city is to be supplied entirely by renewable energy, using systematic recycling techniques it is to be nearly waste-free and will have significantly reduced water consumption. Thanks to an underground transportation system, it is to have carfree streets.

As a first step, each of the participating Institutes sends one representative to form a project group in Masdar City with the goals of project acquisition and making preparations for the founding a Center. Further, the possibilities of creating a joint institute for sustainable urban development shall be examined. It is striven to establish a close cooperation with the Masdar Institute of Science and Technology, which is currently being constructed.

Existing contacts and on-going projects, especially with the ISE were the basis for starting the strategic cooperation. “To initiate rapid change from our present energy supply system to one based on renewable energies, we need ambitious examples. The construction of a world-wide exemplary concept for sustainable urban planning within this initiative will have global impact, and we are looking forward to make a substantial contribution to this project”, says Prof. Eicke R. Weber, Institute Director of ISE, who, as the representative for the Fraunhofer Gesellschaft, signed the Memorandum of Understanding.

Presently Fraunhofer ISE is working on first projects with Masdar in the field of solar climatisation as well as solar-thermal process heating. Three spin-off companies of ISE, Mirroxx, Concentrix Solar and Solar Spring, have already established contacts in Masdar. Solar energy with its wide variety of application fields is a central focus of the cooperation. Similar importance will be placed on sustainable technologies such as energy efficient buildings, sustainable natural resources, desalination technologies, intelligent electricity supply concepts,

electro-mobility, simulations of architecture and engineering and sustainable behaviour. Also, design projects based on virtual reality concepts are in planning. In such processes planners, users and visitors can collectively plan and experience the zero-carbon city already during the design phase using the Virtual Reality Software developed by IAO. This software provides efficient support for the complex planning processes and allows the customers and visitors to experience the city by means of impressive real-time computer graphics. In parallel, researchers from IBP, who hold experience in building in extreme climates, will demonstrate the possibilities for increasing both the comfort and the energy efficiency in the planned buildings.

II. Складіть 10 спеціальних запитань до тексту А.

III. Перепишіть та письмово перекладіть 1,2 абзаци тексту В; Складіть 5 запитань до 3 абзацу тексту В:

1. Researchers have hypothesized that populations near the northern boundaries of geographic ranges in the Northern Hemisphere would be pre-adapted to warming and thus will increase with warming, facilitating range expansions. However, the assumptions underlying this theory have not been previously tested. If these northern populations do not increase under warming, species may not track changing climatic conditions and instead decline under climate change.

   A team of researchers describe how they tested the assumption that populations at the northern edge of a species' range will increase with warming and thereby enhance the colonization process by using two butterflies: the Propertius dusky wing and the Anise swallowtail. They note that butterflies serve as a kind of flagship species for studying the effects of climate change. They live and die relatively quickly and researchers have garnered a substantial amount of information about them and their habits. Insects in general are important subjects for climate studies because of the key role they play in areas such as pollination and the cycling of nutrient in ecosystems.
2. The scientists pointed out that by comparing and contrasting two distinct butterfly species in the same geographic area, they can obtain general principles to help predict if species will change their geographic ranges under climate change.

The group of scientists found that populations at the northern range edge in both butterfly species experienced problems when exposed to warmer conditions the conditions that they will experience under climate change. The dusky wing performed well in the summer months, initially suggesting that populations could increase with warming conditions. However, it performed poorly under warmer winter conditions, which would likely offset the summer population gains. Additionally, range expansion of the species is inhibited by the lack of host plants.

3. Northern populations of the swallowtail did not benefit from any of the warming treatments. The species fared badly during heat waves occurring during the summer months when tested under field conditions and fared no better under conditions of steady, moderate warming in the laboratory. Temperatures at the northern edge of the geographic range also impacted the host plant the species relies on, implying that interactions among species could change under climate change.

   The results shed doubt on the assumption that populations near the upward range boundary are pre-adapted to warming and will increase with upward range expansions and this paper is the first based on experiments to say so. There is the ongoing discussion among scientists on when and how to use an environmental strategy known as "managed relocation." Managed relocation, also known as "assisted migration," has emerged as a possible means of preserving species endangered by rapid climate change and other environmental threats. The concept involves picking a species up and moving it potentially hundreds of miles to a place thought to be more accommodating, but which is outside of the species' native range.

IV. Перепишіть та письмово перекладіть на українську мову, звертаючи увагу на переклад інфінітива та інфінітивних зворотів:

1. The scientists believe the increasing number of plants and factories and carbon dioxide emissions from cars to have been the main reasons of global warming for the last few decades.
2. This project is known to have been carried out jointly by the Center for Ecology and Hydrology and the Met Office to assess the occurrence and magnitude of extreme flood events in the UK during the last few decades.

3. The project was said to involve the analysis of the meteorological conditions made with the help of new equipment, training of qualified staff and identifying links with organizations responsible for flood warning.
4. Some specialists believe Ukraine not to exceed 1990 greenhouse gas emissions level till 2030 even under the optimistic economic development scenario which predicts the highest greenhouse gas emissions.
5. The thermometer is to be protected from the direct and reflected rays of the sun.
6. For a cloud to form, the air must first become saturated with respect to water.
7. We suppose the prediction of hurricanes to be limited mainly because of lack of observation from the ocean areas.
8. The vertical distribution of ozone is likely to be valuable in the study of stratosphere circulation using ozone as a tracer.
9. The ancients already knew weather and temperature changes to be dependent upon advection.
10. Heavy icing conditions can be expected to occur in freezing rain.

V. Перепишіть та письмово перекладіть речення на українську мову, звертаючи увагу на відмінність у перекладі залежного та незалежного дієприкметникових зворотів:

1. Having made such forecasts on the ground of foreign models, the specialists concluded that these models didn't consider the peculiarities of Ukrainian climate.
2. Having won the project to increase the meteorological service's capability to forecast and warn of severe flooding and other severe weather events, the Met Office became very popular among scientists of the world.
3. Multi-beam radar data from the UK weather radar network were used to generate a rain-analysis field covering England and Wales, these data appearing very useful for agricultural works planning.
4. The waters surrounding The British Isles are dominated by strong tidal.
5. Using a theoretical formula mentioned above the scientists worked out a “coefficient of growth” for the ice at various places in various years.
6. Dissolved nitrogen cannot be determined by direct chemical methods.

7. The diurnal variation of relative humidity is determined by absolute humidity and temperature, the latter being the controlling factor.
8. Considering the atmosphere, we find that unstable conditions occur every day and every hour.
9. It was mentioned that on the Atlantic coasts of the United States the tide is of the semidiurnal type, diurnal components being small.

VI. Перепишіть та перекладіть на українську мову речення, які мають підрядні умовні речення:

1. Some models carried out at the Hadley Center earlier showed that once Greenland begins to melt, it wouldn't be possible to ever regrow it to its present size, even if CO2 was reduced to pre-industrial concentrations.
2. If ocean warming penetrated sufficiently deeply to destabilize even a small fraction of the methane locked up in methane hydrates and release it into theatmosphere, it could lead to a rapid increase in greenhouse warming.
3. If the scientists hadn't started using the method of computer modeling a few years ago, they wouldn't have estimated the future rate of global warming and wouldn't have warned the society of its harmful effects.
4. If the scientists had analyzed the data on precipitation in details, they would have warned the population of the region about the possible flood event.
5. The dissolved oxygen might be saturated if there were no biochemical oxygen consumption in the sea.
6. If thin explanation were correct, the heat produced in Europe and the cold produced in Greenland by the Gulf Stream would be the greater the warmer the Gulf Stream is.
7. If predictions of temperature conditions had been made from the average charts than in general, they would have given temperatures above the thermocline within 2oF.
8. If you cross a certain current and wish to know the limits of it, you have to increase the number of observations.
9. If these air temperatures were higher than usual, ice conditions would be better.
10. Had it rained without a break for two hours, it should have been described as “continuous rain”.

VII. Перепишіть та письмово перекладіть нижче наведені речення, звертаючи увагу на *–ing* форми:

1. The importance of these data in determinating the distribution of properties and the character of the circulation around the Antarctica is very great.
2. Rain may occur during a considerable period of time preceeding and following the frontal passage and is of widely varying duration.
3. Searching this area took much time.
4. This area being surveyed a long time ago, our task was to research it accurately.
5. Echo sounding is a method of measuring the depth of water by determining the time required for sound waves to travel from a point near the surface to the bottom and return.
6. Describing a new method of ecological calculations is very useful for our particular work.
7. Land and sea areas being so variable react in many different ways to the atmosphere which is constantly circulating in a state of dynamic activity.
8. When freezing water expands by about one-tenth of its volume.
9. Having reached the earth, the precipitated water begins to accumulate additional impurities.
10. The word "climate" comes from the Greek "Klima" referring to the inclination of the sun.

VIII. Перепишіть та письмово перекладіть на українську мову наведені нижче речення, звертаючи увагу на різні значення дієслів *should, would*:

1. Were it not for natural 'sinks' in ecosystems and the oceans, climate would already be changing faster than it is.
2. The figures show that about half the ice in Greenland would melt in the first 1.000 years, with almost all melting after 3.000 years.
3. Carbon dioxide is responsible for about 50% of the greenhouse effect, so major attention should be given to strategies that would limit or even reduce its emission.
4. Production methods should be improved and all the industrial units should be provided with treatment plants so that the wastes are properly treated and recycled.
5. People all over the world should combine efforts to solve the serious problem of environmental protection.

6. The scientists said that all those measures would help the people in solving the vital problems and prevent the future generation from dangerous diseases caused by polluted environment.
7. It should be recognized that the hydrologic cycle has no beginning or end as water evaporates from the land, oceans and other water surfaces to become a part of the atmosphere.
8. The expected climatic change would sharp the problems of drought, deforestation and soil erosion.
9. The emission of the gases into the atmosphere should be monitored carefully.
10. If there were no atmosphere, there would be no clouds, no rain.

IX. Перепишіть та перекладіть на українську мову речення, звертаючи увагу на різні значення виділених слів:

1. Once we have decided what level of concentrations is safe, we then have to calculate what emissions are ‘allowed’ so as not to exceed them.
2. The modelers have used the HadCM3 model to explore climate change due to each of this scenarios, and the figures show results from two of them.
3. Since the rate that global emissions have to be limited to in order to prevent dangerous climate change has been identified, this total then needs to be allocated to specific countries.
4. Provided the specialists use the relevant models, they can investigate the impacts of relatively gradual change and their associated costs.
5. The circulation of the upper atmosphere, or stratosphere, must be considered as well as that of the lower atmosphere or troposphere where weather takes place.
6. In order to study the diurnal variations of magnetic disturbance we must take into consideration the results of a great number of observations.
7. Neither of these investigations proved to be satisfactory.
8. Not only does water expand when it is being between 4^{o} or 0^{o}C but when it changes to the solid, there is marked expansion.
9. Because of the danger of radiation, one must take safety measures.
10. Acid rain falling over the Atlantic as far out as Bermuda and the acidity of snow in the Arctic are the examples of long-range transport of acids.

X. Перекладіть 10 тис. зн. суспільно-політичного тексту.

XI. Перекладіть 10 тис. зн. тексту за фаховою тематикою.

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