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Кубанский государственный университет

**ЭКЗАМЕН  
ПО АНГЛИЙСКОМУ ЯЗЫКУ**

Учебное пособие  
для аспирантов и соискателей

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Пособие представляет собой комплексный курс английского языка для аспирантов и научных работников, готовящихся к сдаче кандидатского экзамена. Курс адресован в первую очередь лицам, занимающимся точными и естественными науками, но может быть использован и в группах гуманитарного профиля. Пособие состоит из текстов и послетекстовых заданий, а также заданий для развития навыка говорения в соответствии с государственным образовательным стандартом.

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## **ТРЕБОВАНИЯ К ВСТУПИТЕЛЬНОМУ ЭКЗАМЕНУ ПО АНГЛИЙСКОМУ ЯЗЫКУ**

На экзамен необходимо представить литературу по специальности на иностранном языке общим объемом 15 страниц.

### **ТРЕБОВАНИЯ К ЛИТЕРАТУРЕ**

- а) литература должна представлять собой монографию (часть) или несколько статей;
- б) на титульном листе должны быть выходные данные (автор, название, место, год);
- в) литература не должна быть адаптирована;
- г) литература не должна относиться к разряду учебных пособий или справочных изданий;
- д) литература должна быть написана носителем языка.

### **СОДЕРЖАНИЕ ЭКЗАМЕНА**

1. Чтение и письменный перевод со словарем на родной язык оригинального текста по специальности объемом 1200 знаков.
2. Передача содержания текста на английском языке (объем текста 2500 печатных знаков).
3. Беседа по темам:
  - 1) О себе
  - 2) Учеба в университете
  - 3) Моя дипломная работа
  - 4) Мое научное исследование
4. Умение представить себя, дать информацию на иностранном языке о вузе, факультете, который вы закончили, сообщить имя руководителя, вид обучения (очная или заочная аспирантура).

## **СТРУКТУРА КАНДИДАТСКОГО ЭКЗАМЕНА ПО АНГЛИЙСКОМУ ЯЗЫКУ**

1. Письменный перевод со словарем оригинального текста по узкой специальности на русский язык. Объем текста 2300-2500 печатных знаков. Время выполнения - 35 минут. Отрывок выбирается членами комиссии из общего объема прочитанного в курсе изучения специальной литературы (150000 печ. знаков)

Форма проверки:

- а) выборочное чтение вслух части текста;
- б) проверка подготовленного перевода;
- в) передача основного содержания текста на иностранном языке в форме резюме.

2. Просмотровое чтение оригинального текста по специальности. Объем 1200 знаков. Время выполнения 2-3 минуты. Форма проверки - передача на русском языке не менее 70% извлеченной информации.

3. Устное реферирование на английском языке прочитанного со словарем текста общественно-политической и социальной тематики. Объем текста 2500 печатных знаков. Время на подготовку 15 минут.

4. Беседа на английском языке по вопросам, связанным со специальностью и научной работой аспиранта.

### **Темы для беседы на кандидатском экзамене:**

1. О себе
2. Учеба в университете
3. Учеба в аспирантуре
4. Мои научные интересы
5. Современное состояние науки в вашей области
6. Научная работа и достижения вашей кафедры
7. Роль иностранного языка в работе над диссертацией
8. Служебная командировка

5. Знание слов по специальности на базе составленного словаря. Соискатель представляет на экзамен составленный им в алфавитном порядке англо-русский словарь терминов по специальности - 500 единиц (слова должны иметь транскрипцию, перевод).

6. Беседа с экзаменаторами на английском языке по теме реферата. Реферат - обзор зарубежной литературы по исследуемой проблематике должен быть представлен до экзамена.

К реферату предъявляются следующие требования:

1) Реферат выполняется на родном языке. Объем текстового материала статей не менее 150 тыс. знаков.

2) Отбор материала осуществляется аспирантом и его научным руководителем по специальности с учетом значимости материала для научной работы.

3) Объем реферата 12-15 страниц машинописного текста.

4) В конце прилагается список литературы на английском языке, оформленный в соответствии со стандартами оформления диссертации.

## ОБРАЗЕЦ ЭКЗАМЕНАЦИОННОГО БИЛЕТА

### БИЛЕТ № 1

Первый вопрос.

Прочитайте текст со словарем. Переведите указанный отрывок письменно, подготовьте резюме всего отрывка на английском языке.

#### A STUDY OF FATIGUE CRACK GROWTH RATE UNDER RANDOM STRESSES

##### 1. Introduction

The study of fatigue crack propagation is an important subject related to design of offshore structures, ships and aircraft and has attracted considerable attention of engineers. Now, the research methods for fatigue crack growth rate and life estimation under random stresses can be divided into two categories. One is the cycle-by-cycle approach, in which fatigue life is predicted by accumulating the crack growth under spectrum loading cycle-by-cycle according to the hysteresis model [1] [2]. The other approach is based on statistics, which substitutes a statistical characteristics for stress in expression of stress intensity range and estimates the fatigue life using statistical characteristic stress intensity range ( $AK^{char}$ ). There are two kinds of  $AK^{char}$  - Root-Mean-Cube and Root-Mean-Square [3] [4]. There are some different expressions for Root-Mean-Square stress  $\sigma_{rms}$  [5] [6]. But a comparison of effects of different expressions of fatigue crack growth rate on fatigue lives has not been found yet. Here, the influences of different expressions of  $AK^{char}$  on  $da/dt$  compared by an experiment under random loading and a crack growth life prediction formula under narrow-band Gaussian stresses history is derived. In this formula, the value of Root-Mean-Square only depends on the self-power-spectral-density (P. S. D) of the stress history. So, this method is a kind of P. S. D.

##### 2. Fatigue crack growth rate under random stresses

The relationship between fatigue crack growth rate  $da/dN$  and stress intensity range  $\Delta K$  can be expressed by famous Paris formula as

$$\frac{da}{dN} = C(\Delta K)^m \quad (1)$$

where  $C$ ,  $m$  are material constants;  $a$  is the length of crack;  $\Delta K$  are cycles and

$$\Delta K = \Delta S \sqrt{\pi a} F = (S_{\max} - S_{\min}) \sqrt{\pi a} F \quad (2)$$

Here,  $\Delta S$  is stress amplitude,  $F$  is a shape factor. In the process of random loading, the cycles of stress amplitude are difficult to determine.

The results obtained by various counting methods (such as the rain-flow, counting method, etc.) are different, so the characteristics of fatigue crack propagation can be described by crack growth rate with time  $t$ , which is defined as

$$\frac{da}{dt} = f_0 \frac{da}{dN} \quad (3)$$

where  $f_0 = \frac{dN}{dt}$  is a mean zero-crossing rate with positive slope.

According to the theory of random processes, if the stress history  $S(t)$  is a Gaussian narrow-band stable and ergodic history and its one-side power-spectrum density function is  $G(f)$ , then we have

$$f_0 = \frac{\int_0^{\infty} f^2 G(f) df}{\int_0^{\infty} G(f) df} \quad (4)$$

**Перевод текста:**

### СКОРОСТЬ РОСТА ТРЕЩИНЫ УСТАЛОСТИ ПОД ДЕЙСТВИЕМ СЛУЧАЙНЫХ НАПРЯЖЕНИЙ

Соотношение между скоростью роста трещины усталости  $da/dN$  и амплитудой интенсивности напряжения  $\Delta K$  может быть выражено известной формулой Париса следующим образом:

$$\frac{da}{dN} = C(\Delta K)^m \quad (1)$$

где  $C, m$ - константы, присущие материалу,  
 $a$  - длина трещины,  
 $N$  - количество циклов и:

$$\Delta K = \Delta S \sqrt{\pi a} F = (S_{\max} - S_{\min}) \sqrt{\pi a} F$$

Здесь  $\Delta S$  - амплитуда напряжения,  $F$ - коэффициент формы. В случае случайного действия циклы амплитуды нагрузки определить трудно. Результаты, полученные с помощью различных численных методов (таких как численный метод «дождевого потока» и др.), различны, поэтому характеристики распространения трещины усталости могут быть описаны скоростью роста трещины за время  $S$ , что определяется как:

$$\frac{da}{dt} = f_0 \frac{da}{dN}$$

где  $f_0 = \frac{dN}{dt}$  математическое ожидание скорости с положительным градиентом.

В соответствии с теорией случайных процессов, если хронология напряжения  $S(t)$  является стабильной и эргодической узкополосной Гауссовой хронологией, а функция плотности спектральной мощности напряжения -  $G(f)$ , то мы имеем:

$$f_0 = \frac{\int_0^{\infty} f^2 G(f) df}{\int_0^{\infty} G(f) df}$$

### **Второй вопрос.**

Прочитайте текст и перескажите его на русском языке.

**Solid-State Electronics**  
**VoL33, №8 pp. 1049-1054,1990**  
**R. Kishore**

### **GENERALIZED EQUATIONS FOR THE STEADY-STATE ANALYSIS OF INHOMOGENIOUS SEMICONDUCTOR OR DEVICES**

Equation (50) uncovers some additional sources of the photo-voltage which do not appear in the approximate treatments [13, 14], based on the first-order solution of the Boltzmann transport equation. These new sources are due to the last three terms which depend on the gradients of the equilibrium concentration and mobilities of  $s$  particles and the photoelectric field. It also shows that the third term due to the gradient of the effective masses of  $s$  particles and the fourth term due to Dember potential depend on the drift kinetic energy  $W$ . The fifth term due to the gradient of the local equilibrium kinetic energy was not considered in the earlier treatment [13, 14]. The new sources, due to last three terms may give a significant contribution in solar cells operating at strong photoelectric field and those using the semiconductors having high carrier mobilities.

Данный текст повествует о дополнительных источниках фототока. Эти источники выводятся из последних трех членов уравнения Больцмана, которые зависят от градиентов концентрации равновесия и электромагнитного поля. Что же касается свойств новых источников, то благодаря трем последним элементам они могут давать существенное содействие элементам, работающим в сильном электромагнитном поле и использующим полупроводники.

### **Третий вопрос.**

Прочитайте статью со словарем и изложите ее содержание на английском языке.

### **MOBILE PHONES MAKE YOU ILL, SURVEY SHOWS**

Memory loss, fatigue, headaches, dizzy spells and burning skin have been linked to mobile phones in the largest ever study carried out into their use.

The findings come from a year-long survey of almost 11,000 mobile phone users in Norway and Sweden.

About a quarter of those questioned reported memory loss, nearly half suffered headaches and almost two-thirds complained of feeling abnormally drowsy.

Warmth behind the ear or burning skin was reported by 84 per cent, while 35 per cent said they had difficulty concentrating during or immediately after a call.

Dizziness was experienced by 13 per cent of users in Norway and 32 per cent in Sweden - the difference has been explained by discrepancies between translations of the survey.

Symptoms were reported by all users, regardless of whether the transmitter system was analogue or digital.

Heavy users were found to be at greatest risk, but even those on the phone for just two minutes a day suffered health problems.

The study, carried out by Sweden's National Institute for Working Life, SINTEF Unimed in Norway and the Norwegian Radiation Protection Authority, showed users aged under 30 were three-and-a-half times more likely to suffer health problems than older users.

Researcher Dr Gunnhild Oftedal said: 'The clearest result is that people using their phones the most report the most symptoms. There could be a range of factors for this but we can't exclude anything related to radiation.'

In Britain, 15 million people - about one in four of the population - own a mobile phone.

Alasdair Philips, of consumer organization Powerwatch, said: 'There is no question at all that these health effects are very real and of great concern.

'Even if you accept that just one person in ten - and these figures are higher - is suffering problems, that's still 1.5 million people in Britain alone.

'If you don't suffer any problems then fine, but if you do put your mobile aside for a week or two and see what happens.'

Previous studies have linked mobile phone use to tumors or genetic damage leading to a weakened immune system of Alzheimer's disease.

### **Пересказ статьи.**

The article under the head-line "Mobile phones make you ill, survey shows" was printed in the Metro, which dates back to May 17, 1999.

The aim of the article is to give the reader some information on the negative effects that mobile phones may have on people's health. According to the text not only heavy users, but even those on the phone for just two minutes a day suffer headaches, memory loss, fatigue and dizzy spells. Further the author reports that according to Sweden's National Institute research users under 30 are more likely to suffer health problems than older ones. He also quotes Dr. Gunnhild Oftedal's appeal to the public to reduce the mobile phone usage, at least for some time.

In conclusion the author mentions the results of the previous studies that linked mobile phone use to tumours or genetic damage.

I find the article of current importance because of the rapid growth of mobile phone role in our day-to-day communication. And being an active phone user myself I find it especially useful.

### **Четвертый вопрос.**

Расскажите о своем научном исследовании и ответьте на следующие вопросы.

## **MY SCIENTIFIC RESEARCH**

When a student I felt a call for research and creative work, that's why I decided to take a post-graduate course. And now I work in the chosen field under the direct supervision of experienced specialists.

One of the branches of investigation at our department is Volterra integral equation. S. There are still many problems to be solved in this area though much has been written relating to the equations of this type with different periodic kernels. A lot of new facts have been accumulated in this field.

However, little is known about Volterra integral equations with homogeneous kernels. That's the reason why I have chosen it as the theme of my future thesis. Now, I am concerned with obtaining data

of asymptotic behaviour of solution in different cases. A detailed study is in process and I have made some progress in this direction. It should be stressed that our methods are very laborious and have certain limitations.

In conclusion I would like to add that I work really hard and expect to complete my thesis in three years. I am really interested in obtaining a Master's degree and I'll do my best to write and to prove the dissertation.

### **Questions:**

- 1) What is the field of your investigation?
- 2) Why are Volterra integral equations of great importance?
- 3) How can you describe the methods of investigation?

## УСТНЫЕ ТЕМЫ

### ABOUT MYSELF

Let me introduce myself to you. My name is Nickolay Ivanovich Petrov, but my parents, friends and relatives call me Nick. I was born in the city of Krasnodar where I live now together with my parents.

Last year I graduated from the University with distinction. When I went to school, I felt a call for Chemistry, that's why I decided to obtain higher education in this field of learning. Here I should say that it was my lucky chance to study for 5 years at the faculty of Chemistry where I developed a habit of research and creative work. And here I got a proper training in many subjects. I usually did a lot of reading at home and it helped me to get through the state exams with credit. At present I'd like to continue doing research in my special field and to take up a postgraduate course. For me there's nothing like working under the direct supervision of experienced specialists highly competent in the subject, who provide the students with proper encouragement and impart precious knowledge to them.

When I was a third-year student, my term-paper was a success and I was invited to join the scientific society the leaders of which had already won the international recognition and now are trying to foster love for research work and creative quests in young people.

To tell the truth, I'm a work-hard, play hard-kind of guy, which means I successfully combine study with leisure. I haven't got any special hobby, but I'm fond of reading books. They give me more knowledge and broaden my outlook. Besides, books contribute greatly to my own education. I believe the time spent on a good book is never wasted. The historical novel is my favourite literary genre.

Sometimes I play different sport games to keep fit and derive pleasure. My hobbies help me to relax, so that after weekends I'm ready to get down to my studies.

Finally, I hope to continue my research and make an efficient chemist.

#### Questions:

1. What is your native town?
2. Did you find it difficult to study at the University?

3. What subjects were you good at at school?
4. How did it influence your future studies?
5. What was your usual way of preparing for classes?
6. What do you intend to do after graduating from the University?
7. You believe that it's on the part of the supervisors to guide our creative work and research, don't you?
8. What made the third year memorable for you?
9. How did you manage your time and how did it affect your work?
10. What do you hope to do in future?

#### Words and Phrases:

- to introduce oneself - представляться  
to graduate from the University with distinction - окончить университет с отличием  
field of learning - область знаний.  
post-graduate course - аспирантура, курсы усовершенствования  
to be in the habit of doing smth. - иметь привычку что-либо делать  
to obtain higher education - получить высшее образование  
to impart knowledge (to) - передавать знания  
to do reading - готовиться к занятиям  
to develop/gain a habit of research and creative work - выработать навыки исследовательской и творческой работы  
to feel a call for Chemistry - иметь склонность к химии  
to get through state exams - сдать государственные экзамены  
to research in the chosen area - проводить исследования по избранной специальности  
to make the best of one's abilities - найти наилучшее применение своим способностям  
to have the subject at one's fingers' ends - отлично знать свой предмет  
to collect and process data - собирать и обрабатывать данные  
an able student - способный студент



to foster in young people love for research work and creative quests - привить молодым людям любовь к исследовательской работе и творческому поиску

a capacity for (detailed) scientific analysis/criticism - способность к научному анализу/научной критике

to have a scrupulous/tidy/analytical mind - иметь аналитический склад ума

to envy somebody for the precision/rapidity/elegance of one's experiments - завидовать кому-либо за точность/быстроту/изящность эксперимента

one's subtle/fertile mind - острый/полный идей ум

to be full of facts/speculations/ideas - изобиловать фактами/размышлениями/идеями

to generalize - обобщать

to like unraveling/solving puzzles - любить разгадывать загадки

to take a post-graduate course - учиться в аспирантуре

to be well-versed in - иметь большой опыт/быть опытным в

## UNIVERSITY STUDIES

When I went to school, I felt a call for Chemistry, that's why I decided to obtain higher education in this field of learning. Here I should say that it was my lucky chance to enter the Kuban State University and study for 5 years at my favourite faculty. And here I got a proper training in many subjects. While studying I was involved in different types of activities. I attended compulsory and optional courses and I suppose that my university studies helped me become an intelligent and well-educated person. When I was a third-year student, my term-paper was a success and I was invited to join the scientific society the leaders of which had already won the international recognition and reputation and now are trying to foster in young people love for research work and creative quests.

It's common knowledge that being at university is quite different from being at school, because you have to rely more on your own abilities and motivation. When a student, I tried to do my best to develop my abilities and to gain a habit of research and creative work. However, it doesn't mean that I spent all my time studying. I had a so-

cial life too: basketball games and parties with my friends. In summer we chanced to go to the Black sea for a couple of days, everybody enjoyed it.

I must say that I appreciate honesty, kindness, a sense of justice and intelligence, and I was really lucky to find these qualities in my group-mates.

During the last year of our studies we became really close and we decided to get together every year or at least to keep in touch. My final year at the University was really tense. I did a lot of reading for my classes and it helped me get through the state exams with credit.

As a matter of fact, I decided to take up a post-graduate course, because I want to make the best of my abilities and I intend to obtain a Master's degree. People say that I'm an able student. Moreover, I always try to do my best, because I want to make an efficient chemist.

### Questions:

1. What is your major?
2. What optional courses did you attend?
3. What made you attend optional courses?
4. Why did you join the scientific society?
5. Who headed the scientific society?
6. What abilities did you develop during your University studies?
7. How did you find your group-mates?
8. Was it difficult for you to get through the state exams? Why?
9. Why did you want to take up a post-graduate course?
10. Do you want to devote yourself to scientific work?

### Words and Phrases:

to feel a call for Chemistry - иметь склонность к химии

to do (to study, to take up) Chemistry - изучать химию

to get through the state exams with credit - успешно сдать государственные экзамены

to enter the University - поступить в университет

to be a day-time student - учиться на дневном отделении

compulsory course (required) - обязательный курс

optional course (election) - дополнительный курс

to write a term-paper - писать курсовую работу

assistant professor - старший преподаватель  
to join the scientific society - быть принятым в научное общество  
to be one's major - главный, профилирующий предмет  
to obtain a Master's degree - получить степень кандидата наук  
an able student - способный студент  
to make the best of one's abilities - найти наилучшее  
применение своим способностям

### MY SCIENTIFIC RESEARCH

When a student, I felt a call for research and creative work. So I decided to take up scientific research more seriously. At present I'm a post-graduate and I work in my special field.

I must say that being a post-graduate student is certainly not easy. Everything depends on your own motivation and abilities. That's the reason for my intense and hard work the only aim of which is to meet the requirements of my post-graduate training. I believe it's on the part of a supervisor to foster love for science.

The objective of this training is not only to examine the aspects of scientific phenomena, but also to develop your own ideas. I hope that this will be useful for all students engaged in scientific research, because it includes the ways of realization and presentation of the results of scientific work, as well as organization of conferences, congresses and seminars. One of the fields of investigation at the department of Mathematics is Volterra integral equations with different periodic kernels. There are still many problems to be solved in this area. Much has been written relating to the equations of this type. A lot of new facts have been accumulated in this field.

However, little is known about Volterra integral equations with homogeneous kernels. This is supposed to be the theme of my future thesis. Presently, I'm concerned with obtaining the data of asymptotic behaviour of the solution in different mediums. A detailed study is in process and I've made some progress in this direction. I may say that our methods are very laborious and have their drawbacks.

I'd like to say that I'm really hard-working so I expect to present my thesis in three years. I'm also interested in obtaining a Master's degree and I'll do my best to write and uphold the dissertation.

Once my supervisor told me: "You should remember that all your ideas are like precious diamonds and we appreciate it, but every diamond needs a little ray of light to shine and we will do our best to provide it. And only when all your suggestions, ideas and experiences are presented and discussed the aim of this training will be fulfilled".

#### Questions:

1. What do you favour more, intelligence or diligence?
2. Can ambition be a stimulus in scientific work?
3. What is the role of a scientific advisor in developing a person's talent?
4. Do you work in collaboration with other teachers of the institute?
5. What attitudes are necessary for successful work in theoretical research?
6. What theories do you use in your research?
7. What methods of investigation are commonly employed in your research?
8. Is it only physics or any other adjacent sciences that your research is concerned with?

#### Words and Phrases:

to feel a call for - иметь склонность к  
realization and presentation - проведение и представление  
to obtain a Master's degree - получать степень кандидата наук  
to meet one's requirements — отвечать требованиям  
to cultivate (in), foster (in), instill (in) - прививать  
to share one's skills and ideas - передавать свои знания и идеи  
to be engaged in scientific research - заниматься исследовательской работой  
field of investigation - поле деятельности для исследования  
to be accumulated - накапливаться (о знаниях)  
theme of the thesis - тема диссертации  
to be concerned with - заниматься  
to make progress - делать успехи  
laborious methods - трудоёмкие методы  
to make the best of one's abilities - найти наилучшее применение своим способностям  
adjacent sciences - смежные науки

## POST-GRADUATE STUDIES

When a pupil, I felt a call for exact sciences, that's why I decided to obtain higher education in this field of knowledge. When I studied at the University, I decided to major in Physics and develop a habit of research and creative work.

Upon graduation, I was eager to continue doing research in the chosen field, that's why I decided to enter a post-graduate course. For me there's nothing like working under the direct supervision of experienced specialists who can help me to produce work of a high standard.

Of course, being a post-graduate student is not easy. Everything depends on your own motivation and abilities. That's why I work and study really hard and try to make the best of my abilities in order to meet the obligatory requirements of my post-graduate training.

I'm really lucky to have an opportunity to work under the guidance of efficient professors of our faculty. My scientific advisor helps me with my thesis. On the one hand, it's not an easy matter to collect and process data, but on the other hand it's very interesting. It may seem strange, but I really enjoy the innumerable mathematical calculations involved in my research and I'm entirely engrossed in my experiments.

I'm going to do a research in Physics and the theme of my thesis is "The Properties of Semiconductors". I know that it will be really difficult to prove the thesis, but I'll do my best, because I'm really interested in obtaining a Master's degree. My scientific advisor encourages me, and I hope that I'll succeed in performing the experiments and defending my thesis.

Several years ago I was invited to join the scientific society. The leaders of this society have already won international recognition and reputation and now are trying to foster love for research work and creative quests in young people.

I'm not selling myself to you, but I'm a diligent, industrious and persistent student. I do work hard and I know for sure that for me these years won't be spent in vain, because it is the time for self-improvement and self-education.

### Questions:

1. Why did you want to take up a post-graduate course?
2. What does it mean to be a post-graduate student?

3. What is the aim of post-graduate training?
4. What does the program of post-graduate training include?
5. What are the fields of investigation at your department?
6. What is your scientific research about?
7. What contribution are you going to make to the problem in question?
8. What do you like and dislike about doing a research?
9. You believe that it's on the part of the supervisors to guide our creative work and research, don't you?

### Words and Phrases:

to be diligent (industrious, persistent) — быть прилежным (трудолюбивым, настойчивым)  
post-graduate training - учеба в аспирантуре  
to major in - специализироваться в  
to take up a post-graduate course - поступать в аспирантуру  
to meet one's requirements - отвечать ч-л требованиям  
research supervisor (a scientific advisor) - научный руководитель  
to make an experiment (to do research) - проводить эксперимент (исследование)  
to collect and process data - собирать и обрабатывать данные  
to be absorbed in work - погрузиться в работу  
to present the thesis (the dissertation) on the subject - представить диссертацию на тему  
to win the international recognition and reputation - завоевать всенародное признание и славу  
to uphold (to defend) the thesis - защищать диссертацию  
the theme of the thesis is - тема диссертации  
academic abilities - способность к учебе

## SCIENTIFIC RESEARCH AND THE ACHIEVEMENTS OF THE DEPARTMENT

The faculty of Economics at the Kuban State University is one of the most eminent scientific centres in South of Russia. There are many departments here, the oldest of which is the Economic Theory department. It was opened in 1968 and its original name was the department of Political Economy. The main purpose of the scientific research was

the exploration and analysis of Soviet economy. The outstanding role in the department's development belongs to professor Gotlober, the first head of the department.

A spirit of innovation, diversity and constant questioning is very much alive at this department, especially nowadays. Scientific research is of great importance at the department and is done in three main directions:

- macroeconomic stabilization of transformation economy in the times of globalization;
- the theory and practice of transformation of the post-socialist economies;
- the genesis of the history of economic thought and the theory of market economy.

The staff members of the department include professors, associate professors, assistant professors and lecturers. They are engaged in developing many new economic concepts, such as the theory of economic evolution, economic safety, macroeconomic stabilization, and economic growth.

During the years of its existence a lot of research papers have been published in various periodicals of both national and international repute. The faculty members have published many methodology materials, articles and manuals among which are Economic Theory, World Economy, etc.

#### **Questions:**

1. When did the Department of Economics start functioning?
2. What staff members work there?
3. What fields of Economic Theory do students specialize in?
4. What can you say about the history of the department?
5. Where were numerous research papers published?
6. The staff members participate in various scientific conferences, don't they?
7. What contribution did the faculty make to the science of Economics?

#### **Words and Phrases:**

to function simultaneously - функционировать одновременно  
eminent scientific centre - важный научный центр

research work - исследовательская работа

to be engaged in - быть занятым чём-л.

a spirit of innovation, diversity and constant questioning - дух новаторства, разнообразия и постоянного поиска

to publish - опубликовать

manual - справочник

Associate professor — доцент

Assistant professor/Reader - старший преподаватель

staff member - штатный сотрудник

various journals of international repute - различные журналы известные во всем мире

to make a contribution to - делать вклад в...

spurred by success - стимулируемый успехом

to benefit the world/one's nation (to be a benefit for the world/nation) - приносить пользу миру/нации

to be devoted to science - быть преданным науке

to be a devoted scientist - быть увлеченным учёным

to enjoy science - любить науку

to gain enjoyment from research - получать удовольствие от исследования

to have belief in scientific values - иметь веру в научные ценности  
one's dedicated search for scientific truth - беззаветный поиск научной истины

to be promoted - получить повышение

to devote oneself to academic research - посвятить себя науке

#### **BUSINESS TRIP**

Never before in the history of the world have people travelled so much as they do nowadays. It is not surprising and is to be attributed to the competitive society we live in. The international trade is growing rapidly, so is the scientific, economic, and technical potential of the world. It is common knowledge that science is an essential part of this process. Those who take up science and research as life objectives contribute immensely to the well-being of many people.

Practice shows that working in the chosen field under the direct supervision of specialists with broad outlook and deep knowledge of the subject is only half way to 90. The majority of post-graduates find

business trips one of the major sources of obtaining experimental material for analysis.

However, I believe that a post-graduate should bear in mind that once they start carrying out an investigation it's advisable to proceed on their own. In this respect business trips to gather scientific data for research, to participate in a scientific conference, a symposium or a forum, and to do experiments are indispensable.

There is no denying the fact that any business trip should be carefully planned with the help of the supervisor to work out the strategy, to find the Science Centre which organizes this conference, to apply to the headquarters for participation in a conference, to submit abstracts to the Programme Committee, to get ready for the discussions which will follow your paper, and informal group discussions.

At present I'm working at the thesis on Physics. I've already made several trips to places where I gathered material for my research work, and even took some scientific exports. All my trips proved a success. Owing to these business trips I realized in which direction to work and I consider it a great accomplishment.

**Questions:**

1. Why do people travel so much nowadays?
2. Which objectives do you pursue during business trips?
3. Scientific research contributes a lot to the welfare of people, doesn't it?
4. What is one of the ways to obtain material for experimental analysis?
5. What should a post-graduate bear in mind?
6. How should any business trip be organized?
7. How did participation in a scientific conference benefit your research?

**Words and Phrases:**

to contribute to - делать вклад, способствовать ч-либо  
competitive society - конкурентоспособное общество  
life objectives - цели в жизни  
broad outlook - широкий кругозор

to underestimate - недооценивать

to carry out an investigation — проводить исследование

indispensable - важный, необходимый

scientific exports - предметы, вывезенные для научных целей

scientific achievements - научные достижения

great accomplishment - великое достижение

**THE IMPORTANCE OF LEARNING  
A FOREIGN LANGUAGE**

The problem of learning languages is very important today. Foreign languages are in great demand nowadays when the progress in science and technology has led to an overflow of information.

English is the global language, an official or co-official language of 45 countries. Around a quarter of the world's population (1.5 billion people) can communicate in English for work or leisure. Its importance is growing faster than at any time in the last 400 years. Half of all business deals are conducted in English. 2/3 of scientific papers are written in English. Over 70% of all mail is written in English. It is the language of the international air traffic control, maritime, police and emergency services.

Russia is integrating into the world community and the problem of learning English for the purpose of communication is becoming especially urgent.

With the knowledge of foreign languages many opportunities are opened up for post-graduate students. Once they start writing their thesis they face the problem of reading scientific literature in a foreign language. They also publish their scientific articles in English and place their findings on the Internet, so as they could be available for scientists all over the world. Post graduates are often involved in international conferences where they are required to know foreign languages to prove their worth. That is why to know English is absolutely necessary for any educated person, for any good specialist. It can improve their career prospects and boost their salaries. Remember the saying: 'You can use your own language to buy things, but if you want to sell, you must use the language of your customers'.

When learning a foreign language, it is important to know about the culture of the country where the language is spoken. Cultural awareness is just as important as linguistic skills. What is more, if you are a post-graduate student, it will make your research far more interesting, useful and exciting.

**Questions :**

1. Why are foreign languages in great demand, especially at the present time?
2. What is the main international language today?
3. Why is the problem of learning English in Russia so urgent at present?
4. How does learning English help post-graduate students in writing a thesis?
5. It's necessary to use Russian and foreign sources of information in a thesis, isn't it?
6. What can happen when a post-graduate makes his creative work available in the Net?
7. How can a post-graduate prove his worth?
8. What opportunities does a post-graduate with a good command of a foreign language have?

**Words and Phrases:**

to open up opportunities - предоставлять возможности  
foreign language - иностранный язык  
efficient means of information exchange - эффективные средства обмена информации  
to integrate into - объединять, составлять целое  
to contribute to - сделать вклад в  
urgent - необходимый, значительный, важный  
to be highly appreciated - цениться, быть в цене  
manuscript - рукопись  
numerous sites - многочисленные сайты  
available - доступный  
to be involved in — быть вовлечённым  
to prove one's worth - доказать свою значимость  
to make a career — сделать карьеру

to improve one's career prospects - улучшить перспективы профессионального роста  
to exchange experience - обменяться опытом  
cultural awareness - знание, понимание культуры страны изучаемого языка  
findings - результаты исследования  
to boost salaries - значительно повысить жалование

**THE CURRENT STATE OF SCIENCE. PSYCHOLOGY**

At present I'm a post-graduate student at the Kuban State University at the psychology department. In a few months I'll be a scientist ready to make a contribution to the science. I believe that there are a lot of people like me who made up their minds to devote their lives to creative work and research and who will soon obtain a Master's degree.

More and more people consider psychology the science of future. That's why in years to come we will be facing the problem that resolves itself into a question: what is the present state of science in my field and what is post-graduate training for? At the moment most of us can answer that without too much soul-searching. Firstly, this education is for our self-perfection. Secondly, it is for getting some kind of a 'plum' job. But education with a view to working for a living may well be on its way right now for the majority of us. I suppose it is necessary to reshuffle the furniture of our minds in order to gear ourselves towards a future in which outer rewards become less relevant than inner and more individual spurs. So, we learn not for learning's sake alone, but to make our mark and for our country to take a turn for the better.

Psychology is a relatively young science. Originally it was defined by William James as the science of mental life. As the science of mental life developed, its base broadened to include children, adults, the mentally retarded, the insane, and even animals. As long ago as in 1890 a few small laboratories were founded, a few methods of measurement were adopted.

Nowadays the science in my field of learning has got a lot of achievements. Since James' time there has been a remarkable growth

in both the quantity and the quality of scientific research on psychological problems. One can't help mentioning here some famous scientists such as V. Zinchenko, F. Galton who created IQ-tests to study the intellect of a person.

A lot of achievements have been made practically in all sections of psychology.

About 50 000 scientific research works have been written and published lately at our faculty. The psychology department alone has issued 1015 research papers in various periodicals of both national and international repute.

Great opportunities open up to young scientists today. Each year the majority of them take part in international conferences and seminars to share their knowledge and experience.

#### **Questions:**

1. What is the post-graduate training for the present state of science?
2. Is the post-graduate training calculated for making a mark in future or for getting a decent job?
3. How was Psychology defined at the very outset?
4. How did the base of mental life broaden?
5. What is the present state of science in your field?
6. Can you give the names of some outstanding scientists in your field?
7. What did they do for your country?
8. What periodicals in your field of learning do you know?
9. What are the achievements of your department?
10. What opportunities open up to young scientists today?
11. What is your opinion of the present situation of science in your country?

#### **Words and Phrases:**

contribution - вклад, сотрудничество

field - область, сфера, поле деятельности

to make up one's mind - решить, обдуманно прийти к к-л. решению

to push the scientific progress forward\ to facilitate the advancement of science - двигать научный прогресс

self-perfection — самосовершенствование

to reshuffle the furniture of our minds - менять образ и ход мыслей

individual spur - личный стимул

to gear oneself towards - приспособливаться

to make one's mark - отличиться, сделать карьеру, приобрести известность

scientific achievement - научное достижение

a science of mental life - наука о психической жизни

to include — включать ч-л./к-л.

mentally retarded - умственно отсталые

insane - душевнобольной, ненормальный

to found a laboratory - основать лабораторию

to adopt (an idea) - принять, разработать (идею)

international repute - международное признание

periodical - периодика, периодическое издание

at the very outset - с самого начала

'plum' job - доходная работа

to facilitate the advancement of science - содействовать развитию науки

## ГАЗЕТНЫЕ СТАТЬИ ДЛЯ ЧТЕНИЯ И ПЕРЕСКАЗА

Предлагаемый список выражений (см. приложение №1) и серия заданий после каждой статьи помогут подготовиться к пересказу статьи.

### JUSTICE SOUGHT FOR ONLY WOMAN TO DIE IN GEORGIA'S ELECTRIC CHAIR

CUTHBERT, Georgia (AP) - Lena Baker claimed she was being held against her will by a drunken white man and acted in self-defense when she wrested his gun away and shot him.

For a black maid in the segregated South in 1944, her story was a tough sell to a jury of 12 white men. And rumors that she was romantically involved with victim E. B. Knight did not help. Her murder trial lasted just a day, without a single witness called by her court-appointed lawyer.

She was convicted and sentenced to death.

Now relatives of the only woman ever executed in Georgia's electric chair are returning to Cuthbert to honor Baker and try to clear her name with the Georgia Board of Pardons and Parole.

"The family doesn't need to go down in history with a bad name," said Roosevelt Curry, 59, the grandson of Baker's brother.

Since 1943, the board has granted only two pardons for people who have proved their innocence. One also was granted posthumously for Leo Frank, who was lynched in 1915 while appealing a murder conviction.

Board spokeswoman Heather Hedrick said Tuesday the agency has not received a pardon application from Baker's family. Pardon requests usually are filed by living people convicted of less severe crimes, such as drug offenses or robbery, who want to restore such rights as voting and owning a gun.

"I can understand why that would be important for her family to get a pardon for her," Hedrick said. "But the point is to restore political and civil rights, and in this case, I don't know if that would be appropriate."

Prosecution witnesses at her trial said that Knight and Baker went on trips together and that he would often go to her house and demand that she leave with him.

After she was sentenced, her court-appointed attorney filed an appeal, but it was dropped after he withdrew from the case.

John Cole Vodika, director of the Prison and Jail project, an inmate advocacy program, said the family has a strong case for getting her exonerated.

"She should never have been tried for murder", he said. "It was an obvious injustice. That's what the system did with African-Americans who dared resist white men's authority."

"She was a victim of racism, white man's domination over African-American women," he said. "In an effort to cover up what really happened, the county moved to treat it as capital murder. It sure appears they wanted to get rid of her quickly and to limit or eliminate anything happening that would further embarrass the family of the deceased".

The undertaker who brought her body back to Cuthbert buried her in a grave that went unmarked for five decades, until the congregation of Mount Vernon Baptist Church raised \$ 250 for a concrete slab and marker.

The family is planning a memorial service on mother's Day, May 11, at Mount Vernon, where Baker sang in the choir. Her grave is behind the church.

They will place an empty casket in the church, symbolizing the funeral "our family and friends were cheated of," said Curry, who has returned to Georgia after living for years in Newark, New Jersey.

A family friend took Baker's three children away from Cuthbert after the shooting. Other relatives moved to Florida, to New Jersey and to other Georgia towns, he said. "Back then, people were scared," Curry said.

Baker's last living child, Nelsie, now 66, lives in Florida, Curry refused to be more specific.

"Nobody is to go there and mess with her because she is not well," he said. "She's already been hurt enough. Nelsie doesn't even know where her mother is buried, or where her grandfather or uncle are buried."



Baker, who had a sixth-grade education, proclaimed her innocence to the very end.

"What I done, I did in self-defense," she said in her final statement. "I have nothing against anyone... I am ready to meet my God."

### **I. Words and word combination:**

to wrest one's gun - выхватить пистолет у кого-либо

to be sentenced to death - быть приговоренным к смертной казни

to grant pardon for smb. - помиловать кого-либо

to prove one's innocence - доказать чью-либо невиновность

to lynch - расправляться самосудом

a murder conviction - осужденный за убийство

a prosecutor witness - свидетель со стороны истца/свидетель обвинения

to get smb. exonerated - оправдать кого-либо/снять обвинения с кого-либо

### **II. Choose the best answer to the question:**

1. Lena Baker was being held against her will by a ...
  - a) maniac
  - b) drunken Negro
  - c) drunken white man
2. Trying to defend herself she...
  - a) ran away
  - b) bit her enemy
  - c) shot him
3. She was convicted and...
  - a) got a jail sentence
  - b) was sentenced to death
  - c) was released on bail
4. Now her relatives take this case to court because...
  - a) they want to clear her name
  - b) they don't agree with the sentence
  - c) there appeared new evidence
5. Lena Baker was a victim of...
  - a) pursuit
  - b) racism
  - c) a mad man

6. Baker's grave was unmarked for...

- a) five years
- b) five decades
- c) six decades

The family is planning a memorial service on...

- a) New Year's Day
- b) Independence Day
- c) Mother's Day

### **III. Translate into English using active vocabulary:**

1. Преступник выхватил пистолет у полицейского и выстрелил ему в голову, за что и был осужден на 25 лет.
2. Родственники погибшего добились от суда того, чтобы убийца был приговорен к смертной казни.
3. Обвиняемый так и не сумел доказать свою непричастность к убийству 10 человек.
4. Приговор оказался не слишком суров для известного маньяка - убийцы, и люди требовали выдать им преступника для того, чтобы расправиться с ним самосудом.
5. «Я не понимаю, почему у него такой большой срок заключения, он разве осужден за убийство?»
6. Свидетели со стороны истца выставили дело обвиняемого в самом неблагоприятном для него свете.
7. Благодаря своим умелым доводам адвокат все же сумел добиться оправдания своего подзащитного.

### **IV. Answer the following questions:**

1. What crime was Lena Baker accused of?
2. What was she sentenced to?
3. When did it happen?
4. What does her family want now?
5. What is her relatives' opinion of this case?
6. Was the place where Baker had been buried unknown?
7. Did Baker plead guilty?

## **POLICE SUSPECT BRITON IN PEARL'S KIDNAPPING**

KARACHI, Pakistan - Pakistani police say a round-the-clock hunt for kidnapped American reporter Daniel Pearl is making "significant progress" and that a British-born Islamic militant freed by India in a hijacking two years ago has emerged as a key suspect.

The suspect, Ahmad Omar Saeed Sheikh, also known as Sheik Omar Saeed, is a product of Britain's expensive private schools that later became involved with militant Islam and was jailed for five years in India for kidnapping three British tourists in Kashmir.

Now, Pakistan police believe Saeed is the key figure in the abduction of Pearl, the 38-year old Wall Street Journal reporter last seen January 23 when he went to meet a Muslim extremist at a popular Karachi restaurant. Pearl apparently never made it: restaurant employees say they do not remember seeing him that night.

Police say a breakthrough came with the arrest in Karashi of three men believed to have sent e-mails last week that included photos of Pearl in captivity and demanded the return to Pakistan of the prisoners held at the US base in Guantanamo Bay, Cuba. One of the men claimed he received the pictures from Saeed, police said.

"All I can tell you is that we are making, we have made, significant progress, and we hope to recover him soon," Karachi Police Chief Sayed Kamal Shah said Wednesday.

Saeed, who was born in the East End of London, is believed to be linked to two militant groups - Jaish-e-Mohammed and Harkat ul-Mujahedeen. The United States believes both have links to Osama bin Laden's al-Qaida network.

The 27-year-old first-generation Briton was shot and wounded during his 1994 arrest in India in connection with the Kashmir kidnapping, undertaken to demand the release of Islamic militants fighting Indian rule in the contested Himalayan region. The three British backpackers were freed unharmed.

Saeed spent the next five years in jail and was freed with two other Islamic Militants by India on December 31, 1999, in exchange for passengers on an Indian Airlines jet that was hijacked to Kandahar, Afghanistan.

George Paynter, who was Saeed's economics tutor at Forest School in Snaresbrook, East London, said Wednesday he was horrified by his former pupil's suspected involvement in Pearl's abduction.

"It is very difficult for us to understand because it isn't the Omar we knew," Paynter said. "He was a nice bloke and very respectful."

### **I. Words and word combination:**

round-the-clock hunt - круглосуточная слежка / поиски

to be kidnapped - быть похищенным

hijacking-угон, похищение (самолета), воздушный бандитизм

to be jailed - быть осужденным

key figure - «ключевая фигура»/основной подозреваемый

abduction - похищение

to contest - оспаривать, бороться, соперничать

to be freed in exchange for sth./smb. - быть освобожденным в

обмен на что-либо/кого-либо

suspected involvement in sth. - подозреваемая причастность к

чему-либо

### **II. Translate into English using active vocabulary:**

1. Полиция объявила круглосуточные поиски опасного преступника, сбежавшего из тюрьмы прошлой ночью.

2. Жена известного бизнесмена была похищена террористами из дома.

3. Ключевой фигурой в деле по убийству губернатора был признан известный в криминальном мире бандит.

4. Наконец судебный процесс завершился окончательным признанием вины подозреваемого, который был осужден на 10 лет.

5. Все террористы, подозреваемые в угоне самолета, были осуждены на 15 лет тюрьмы.

6. В этом районе произошла целая серия похищений маленьких детей из школ.

7. Заложник был освобожден в обмен на 2-х солдат Российской армии.

8. Подсудимый отчаянно пытался опровергнуть свою причастность к убийству жены и ребенка.

### III. Say whether the following statements are true or false:

1. An American reporter was kidnapped.
2. Sheikh rejects his suspected involvement in kidnapping of 3 British tourists.
3. The American reporter was last seen on January 23.
4. Saeed is suspected of his links to Osama bin Laden's al-Qaida network.
5. Sheikh was freed in exchange for another terrorist.
6. Some people refuse to accept Sheikh's involvement in Pearl's abduction.

### IV. Answer the following questions:

1. Who was kidnapped in Pakistan?
2. Are there any suspects?
3. Did Ahmad Omar Saeed have any involvement with militant Islam?
4. Did he have any previous convictions?
5. Do the police have any suggestions?
6. Why was George Paynter shocked by the news of Saeed's suspected involvement in Pearl's abduction?

## VOTING PATCHY IN UK ELECTION

Voting in the UK general election is said to be patchy, with officials reporting a slow start in some areas and brisker activity in others. The pace of voting is expected to pick up in the evening when many people return home from work.

Officials in Glasgow said turnout by noon was varying between 5% and 15%, but the figure is said to be higher in the nearby marginal constituency of Eastwood. In Southampton it has been predicted that final turnout might not reach 70%. The voters are selecting 659 members of the next parliament, and the party to take power in government. About 45,000 polling stations opened at 07.00 BST on Thursday and will close at 22.00. The first results are expected at about 23.00 BST on Thursday.

After 30 days of hectic campaigning, all the politicians can do now is await for voters to give their verdict. Much of the attention will

be on the numbers of people, who vote, with some opinion polls having suggested that turnout was the lowest since 1935. This time there has also been a much higher proportion of postal ballots, with up to one in five voters choosing to post their vote in some areas. The weather, as always, may have a role to play. So far it has been a mixture of sunshine and showers across much of the UK.

The leaders of all the main political parties are at their homes in their constituencies, resting after a frantic last day of campaigning. Labour leader Tony Blair, Conservative leader William Hague and the Liberal Democrat chief Charles Kennedy clocked up about 2,000 miles between them on Wednesday. Mr. Hague cast his vote accompanied by his wife Fion in his Richmond constituency in north Yorkshire. Mr. Kennedy had already voted by post - but visited his local polling station for the benefit of the cameras. Mr. Blair made the short walk from his home to vote in his Sedgefield constituency, accompanied by his wife Cherie and their three older children. And in Northern Ireland, 100 candidates are going to the polls to vie for 18 seats. The general election results are likely to start being declared within 45 minutes of the polling booths shutting. Each constituency has an average of 80 ballot boxes, which means more than 50,000 of them then have to be sealed and transported from their polling stations to counting locations - mostly by car, accompanied by council workers. Election candidates in Oldham have been banned from making speeches at the count.

The action has been taken by the returning officer for Oldham amid concerns about possible disruption at the count following recent racial tension in the town. The Labour held seat of Sunderland South is the hot favourite to declare its result first for the third time in succession. There are also local government elections being held on Thursday in England and Northern Ireland.

### I. Words and word combination:

- patchy - пестрый, разношерстный, обрывочный  
brisk activity - оживленная деятельность  
marginal constituency - минимальный электорат  
turnout — собрание, сбор  
hectic campaign — лихорадочная кампания

postal ballot - голосование по почте  
cast one's vote - голосовать  
to vie for seats - соревноваться за место  
polling booth - кабина для голосования

## II. Say whether the following statements are true or false:

1. Voting in UK was considered to be usual and calm.
2. The weather doesn't play any role in politics.
3. The leaders of all the main political parties usually rest after pre-election campaign and the elections themselves.
4. Almost 100 candidates are going to the polls to vie for 8 seats in Northern Ireland.
5. The general election results are likely to start being declared within 2 days of the polling booths shutting.

## III. Fill in the gaps:

1. Voting in the UK general election is said to be \_\_\_\_\_ with officials reporting a slow start in some areas and brisk activity in others.
2. The voters ... 659 members of the next parliament, and the party to take power in government.
3. Much of the attention will be on the numbers of people who..., with some opinion polls having suggested that ... may be lower than 70%.
4. Mr. Kennedy had already voted by post - but visited his local \_\_\_\_\_ for the benefit of the cameras.
5. Each constituency has an average of 80 \_\_\_\_\_, which means more than 50,000 of them then have to be sealed and transported from their \_\_\_\_\_ to counting locations - mostly by car, accompanied by council workers.
6. Mr. Hague \_\_\_\_\_ accompanied by his wife Fion in his Richmond constituency in north Yorkshire.

## IV. Answer the following questions:

1. What is the article about?
2. How many members were the people electing?
3. What was the proportion of postal ballots?
4. What were the political leaders doing after the elections?
5. Describe the way all the politicians (candidates) voted?
6. How long did it take to count votes?

## ADVENTUROUS INVESTORS TOLD TO LOOK EAST

Exotic markets are tipped to beat the West again in 2003, but the risks may be as high as the rewards, warns Kathryn Cooper

INVESTORS who gambled on exotic markets such as eastern Europe last year have made impressive gains, while western shares have slumped.

The Romanian market, for example, was one of the top performers in 2002, soaring nearly 90% in sterling terms. Russia and the Czech Republic also posted strong returns of 16% and 25% respectively.

British and American shares, however, lost about a quarter of their value last year.

Experts say some emerging markets could outclass the West once again this year. They are tipping Asia, including China and India. But financial advisers warn that these markets are suitable only for adventurous investors.

Stock market in these countries tend to be less well regulated than in the west, accounting standards are usually less rigorous and countries may suffer political instability.

Advisers recommend reducing risks by investing in a fund where your money is pooled with that of other investors to buy a broad spread of shares.

The potential rewards, however, are high. Emerging economies expanded by an average of 6% a year in the 1990s, compared with growth of just 3% in the developed world.

Foreign & Colonial, the fund manager, believes that Asia, excluding Japan, offers the best opportunities this year.

Sam Mahtani, global portfolio manager, says: "Asia went through the kind of corporate crisis that America is suffering now back in 1997-98. Many companies have emerged in better shape and are still relatively cheap compared with their counterparts in the west".

His favourite country is China. "It is benefiting from huge inflows of money as global firms outsource their manufacturing to the country to benefit from its low costs," he says.

For example, Quanta Computer, to which American tech giants such as Dell and Intel outsource their manufacturing, recently relocated from Taiwan to China to slash costs.

David Gait, who manages the First State Global Emerging Markets fund alongside Angus Tulloch, also favours China. The fund tends to pick Chinese stocks that are listed in Hong Kong. It recently bought a state in BYD, which manufactures batteries for mobile phones, and Techtronic, which makes DIY power tools.

Gait also likes Asian bank stocks. He says: "After the Asian crisis of 1997, consumers stopped spending, but they have recently started to come out of hibernation. Banks are well placed to benefit from the trend, particularly through the growth of credit cards."

He tips stocks such as Thai Farmers Bank and the Public Bank of Malaysia.

Experts say Russia and Eastern Europe could also deliver a strong performance in 2003.

Mahtani says: "Russia has performed well over the past few years. President Putin has delivered a certain amount of stability and is pursuing reforms. Russia's oil and gas sector has benefited from the strong oil price."

Mahtani thinks energy stocks such as Lukoil and Yukos will continue to perform well.

Chris Palmer, manager of the Gartmore Emerging markets fund, backs Turkey: "The recent elections, from which an enthusiastic pro-EU leader has emerged, should create a more stable political environment and this bodes well for the market outlook. We have added to our holdings in Garanti Bankasi, the Turkish bank, and Sabanci, an industrial group."

Other experts are pinning their hopes on Africa and India. Mark Mobius of the Templeton Emerging Markets investment trust says: "South Africa companies offer value for money, are well managed and can compete against the world's best." His fund invests in SAB Miller, the brewer that has a dual listing in London and South Africa, and Sasol, a petrochemical firm.

Mahtani says: "We have increased our exposure to India because the economy looks sound, with lower interest rates and inflation. There are some strong companies such as Reliance Industries, oil, gas and petrochemical group."

Mobius believes all emerging markets are set for a boost as investors reassess their attitude to risk: "The WorldCom and Enron fiascos have shown that developed markets are not necessarily safer than

emerging markets. That is not to say risk does not exist, and you should invest only for the long term." Paul Lott of Bates Investment Services, a financial adviser, recommends that even sophisticated investors have no more than about 7% of their portfolios in emerging markets.

He says: "Our favourite fund is First State Global Emerging Markets. More cautious investors with smaller portfolios are probably better off with international funds that have a small proportion in emerging markets, such as the Foreign & Colonial investment trust."

### **I. Words and word combinations:**

to gamble - рисковать

gains - доходы

share - акция

to slump - резко падать

to soar - увеличивать

returns - доходы, прирост

respective - соответственный

value - стоимость, ценность

to outclass - превосходить

stock market - фондовая биржа

rigorous - строгий

to pool money - собрать деньги

portfolio - портфель, папка

counterpart - двойник, напарник

inflow - приток, наплыв

to slash - сокращать

stake (in) - значительная доля акций

consumer - потребитель

hibernation — зимняя спячка

to bode - предвещать, сулить

to pin your hopes on - полагаться на кого-либо

brewer - компания, занимающаяся производством пива

rate - тариф

boost - ускорение

reassess - переоценить, пересмотреть

to benefit from - извлекать пользу, выгоду

## II. Choose the correct answer:

1. But financial advisers warn that these markets are suitable only for
  - a) sophisticated investors
  - b) successful investors
  - c) adventurous investors
2. Foreign & Colonial, the fund manager, believes that Asia, excluding Japan, offers the best
  - a) investments this year
  - b) opportunities this year
  - c) profit this year
3. Sam Mahtani's favourite country is
  - a) China
  - b) Russia
  - c) India
4. After the crisis of 1997, consumers stopped spending, but they have recently started
  - a) to buy up shares
  - b) to come out of hibernation
  - c) to benefit from investments
5. Russia's oil and gas sector has benefited from
  - a) foreign investments
  - b) the strong oil price
  - c) inflows of money
6. We have increased our exposure to India because the economy looks
  - a) sound
  - b) transparent
  - c) profitable

## III. Say whether the following statements are true or false:

1. The Romanian market, for example, was one of the best performers in 2002.
2. Russia and the Czech Republic also posted strong returns of 16% and 25% respectively.
3. British and American shares, however, lost about a quarter of their cost last year.

4. Experts say some emerging markets could be more successful than the West once again this year.
5. Russia has worked well over the past few years.
6. Investors who deposited their money in western shares have made impressive gains.

## IV. Look at the context and then choose the most likely meaning:

1. adventurous
  - a) courageous
  - b) desperate
  - c) violent
2. to manufacture
  - a) fulfill
  - b) to create
  - c) to produce
3. to pursue
  - a) to persuade
  - b) to continue
  - c) to renew
4. outlook
  - a) perspective
  - b) future
  - c) point of view
5. emerging
  - a) in an early state of development
  - b) profitable
  - c) favourable

## IV. Answer the following questions:

1. Is it possible to avoid risk investing money in eastern markets?
2. Why is China considered to be the favourite country for investments?
3. What is the reason for Russia's good performance?
4. What is the main reason for investors to put their money into the economy of any country?

## MEXICO IN WORLD COURT TO STOP US EXECUTIONS

The Hague, Netherlands - Saying it had exhausted other alternatives, Mexico appealed to the World Court on Tuesday to stop the execution of 51 of its citizens in the United States.

Mexico had initially sought to spare 54 citizens, but said at the starts of hearings that three were removed from death row by Illinois Governor George Ryan, who this month commuted the sentences of 167 inmates, mostly to life in prison, over concerns about capital punishment in his state.

The Mexico government is the first seeking a court order to postpone executions until a 15-member panel of judges can hear its arguments that the United States has violated international conventions by not informing detainees of their right to assistance from the Mexico Consulate.

Although its judgments are binding under international law, the World Court has no independent means to enforce compliance.

In opening remarks in the courtroom at the ornate Peace Palace, Mexico's lead attorney, Juan Gomez Robledo, said "the United States should not be allowed to set any execution dates until the court has heard the merits of the case."

Six Mexico nationals could face death in the first half of the year, he said, two of them as early as next month. Citing the urgency of those cases, he asked the court for a swift decision.

The United States disagreed, saying Mexico was infringing on its sovereign system of justice by questioning the use of capital punishment.

The suit covers cases in 10 states. The judges may take several days to reach a verdict on the request for "preliminary measures" to immediately halt the execution process.

In a 48-page brief filed in The Hague, Mexico asked the court to order the United States to dismiss or retry each case and alleges that the United States violated its international obligations under the 1963 Vienna Convention on Consular Relations, to which both countries are party.

It did not contest the United States' right to impose the death penalty.

"Mexico and the United States have irreconcilable views about the application of the treaty", Robledo said.

After years of fighting the issue in US courts, he said Mexico had been left with no choice but to take its case to the highest international court under the United Nations.

The death penalty has been a source of ongoing tension between the neighboring countries. Last August, Mexico President Vicente Fox canceled a meeting with US President George W. Bush over his refusal to stay the execution of one prisoner, Javier Suarez Medina.

Mexico says it has unsuccessfully intervened in at least 20 capital punishment cases involving Mexicans in the United States over the past six years, and that the United States has systematically violated the rights of its nationals.

### I. Words and word combination:

execution — смертная казнь

to spare smb. - щадить кого-либо

to commute the sentence - изменить приговор

capital punishment - смертная казнь / смертный приговор

panel of judges- судебная коллегия

opening remark - обвинительная речь (вступительное заявление)

death penalty - смертная казнь

irreconcilable views - несовместимые точки зрения / взгляды

ongoing tension - постоянное напряжение, натянутость

### II. Translate into English using active vocabulary:

1. Смертная казнь как наказание все еще существует в некоторых государствах.
2. Эта ужасная болезнь не пощадила ни детей ни взрослых.
3. Из-за неожиданно появившихся новых улик, адвокат настаивал на том, чтобы его подзащитному изменили приговор.
4. Только применение смертной казни может остановить постоянно растущую преступность.
5. В своей обвинительной речи адвокат выставил дело подсудимого в наихудшем свете.

6. Несовместимые взгляды на одни и те же вещи очень часто становятся причиной конфликтов.
7. Том чувствовал постоянное напряжение, находясь в одной комнате с Ником и Бобом.

**III. Say whether the following statements are true or false:**

1. Mexico appealed to the World Court to stop the execution of 51 citizens of the US in France
2. Initially Mexico wanted to spare 54 citizens but their cases were too serious
3. G. Ryan commuted the sentence of 167 people from life in prison to death penalty
4. The World Court has no independent means to enforce compliance
5. The suit covers cases in 10 states
6. The capital punishment has been a source of ongoing tension between the neighboring countries.

**IV. Answer the following questions:**

1. Why did Mexico appeal to the World Court?
2. How many citizens had Mexico initially sought to spare?
3. How did Illinois Governor George Ryan commute the sentence of 167 inmates?
4. What did the attorney Juan Gomes say in his opening remark?
5. Has death penalty been a source of ongoing tension between the neighboring countries?
6. How many capital punishment cases has Mexico unsuccessfully intervened in the US for the last six years?

**WESTERN FINANCIERS HAVE NO ONE TO TALK TO**

This week an annual meeting of IMF and World Bank shareholders opens in Washington.

Fifty countries will send their financiers to the US capital to appraise the past year, to talk to colleagues, and to map out plans for the future. The situation is going to be tense: since last year's meeting in

Hong Kong, the South Asian financials crisis has affected the whole world, destroying a number of economies including ours.

The Russian delegation was to have been led by Vice Premier Alexander Shokhin. Now it is not clear who the shareholders of the two largest international financial organizations are going to see at the opening ceremony on Saturday, October 3. Nor is it clear what the Russian delegation will bring to the meeting. Still, it is already clear how it will leave: empty handed.

In recent years - the "reform years" - relations with the IMF and the World Bank have been based on double standards. The government drilled it into the people's minds that as long as the IMF and the World Bank are giving money, reforms are in full swing and soon life will be even better. Meanwhile, it was saying to the Bank and the Fund: if there is money in the morning, the reforms will come in the evening and if there is money in the evening, the reforms will materialize next morning...

Such a policy could not have led to anything good. And look what we've got: an inflation rate of 63% in the past month, a catastrophic shortfall in tax collection, and a sharp rise in unemployment, the freezing of Russian bank accounts abroad, a left-wing government, and irreparably damaged relations with Western lenders.

It would be an exaggeration to say that Shokhin's resignation dashed the government's hopes for a constructive dialog with the IMF and the World Bank. The gamble on Shokhin as, in his own words, "a showcase for the west", did not come off. Evidence of this is the outcome of the negotiations that he has already held with an IMF mission. Their scenario failed to differ from similar discussions of the past year. Shokhin demanded that the loans pledged earlier be made available while IMF representatives asked to be shown at least a semblance of an economic program by the government. At the same time, everyone understood that the Primakov cabinet had no program at all, let alone a credible one, while the disbursement of yet another tranche would not postpone for a minute the cranking up of the ruble printing presses. According to one negotiator, Alexander Shokhin was not even aware of the current macroeconomic indicators - so irrelevant were they to the talks.



The mission left Moscow determined not to give Russia any money. This is, in fact, the real reason behind Vice Premier Shokhin's resignation. It needs to be pointed out in all fairness that in May, when Anatoly Chubais was to "squeeze" a \$20- billion credit from the IMF and the World Bank, he was granted maximum powers and minimum personal responsibility for the promises that he made. Shokhin, quite the contrary, ended up with minimum powers and maximum responsibility.

The problem that Shokhin's resignation created for the White House and the Kremlin can be compared only to the problem of obtaining Western credits. The new Russian government instantly lost its "human face", there was no economist who could talk with the IMF on an equal footing. True, the feeling is that the Russian government is not really going to talk to the IMF: as soon as Shokhin announced his resignation, Yevgeni Primakov and Yuri Maslukov decided that the government did not need a vice premier for finance in the first place, promptly dividing up among themselves the areas that he was to oversee (up to date, there has been no official distribution of powers in the cabinet). When he learned about this, one IMF official was baffled, asking this author: "But who will go to Washington then?"

This is irrelevant. Russia and international financial organizations no longer have anything to discuss. If the foreigners are still hoping that we will use their money to carry out reforms, their hopes are in vain. We will not. That this decision has not been formulated does not at all mean that it has not been made.

Lately, the worst-case scenarios have been fulfilled in Russia. In a recent interview, Anatoly Chubais predicted that monetary emission, a plummeting ruble, a hyperinflation, and a complete financial meltdown were the most likely scenario, compared to which "August will look like child's play."

Yet there is also another, even more radical scenario which can apparently not be imagined even by liberal reformer Chubais.

The government is irretrievably going left, it supports the national commodity producer by monetary emission and nationalization, defaults on its foreign debt and next we will see the attachment of Russia accounts abroad, a total collapse of the banking system, the rupture of relations with the IMF and the World Bank, and the imposi-

tion of customs barriers. In other words, a total isolation with ration cards, shortages and so forth. And then August 17 will indeed look like "child's play".

Who can vouch that this is impossible?

### **I. Words and word combinations:**

to appraise - оценивать  
to map out - планировать, обдумывать  
tense - натянутый, напряженный  
to drill - обучать, тренировать  
to be in full swing - идти полным ходом  
unemployment - безработица  
irreparably - непоправимо  
to dash - разбивать, швырять, бросать  
constructive - конструктивный  
semblance - сходство, подобие  
to disburse - расплачиваться, тратить деньги  
to postpone - откладывать, отсрочивать  
irrelevant - не относящийся к делу  
in vain - напрасно  
irretrievable - непоправимый  
monetary - монетный, денежный  
commodity - товар  
to default - не выполнять обязательств  
rupture - перелом, разрыв  
shortage - нехватка, недостаток  
to vouch - ручаться

### **II. Choose the correct answer:**

1. How many countries will send their financiers to the US capital to appraise the past year, to talk to colleagues and to map out plans for the future?
  - a) forty countries
  - b) fifty countries
  - c) sixty countries
2. By whom was the Russian delegation to be led?
  - a) Alexander Shokin

- b) Anatoly Chubais
  - c) Yevgeni Primakov
3. How does Shokin call this gamble in his own words?
- a) "a showcase for the East"
  - b) "a showcase for the West"
  - c) "a showcase for the South"

**III. Explain the meaning of the following word-combinations:**

1. "a showcase for the West"
2. "child's play"
3. "human face"
4. "to squeeze"

**IV. Look at the context and then choose the most likely meaning:**

1. to map out
  - a) to plan, to think over
  - b) to frustrate
  - c) to be lost in a reverie
2. semblance
  - a) reminding
  - b) difference, distinction
  - c) likeness
3. to disturb
  - a) to dash
  - b) to lend, to share
  - c) to pay off, to settle one's account (with)

**IV. Answer the following questions:**

1. What kind of meeting was held in Washington this week?
2. What have the relations between the IMF and the World Bank and Russian Government been recently?
3. What changes in the cabinet did Shokhin's resignation cause?
4. Why did the IMF mission leave Moscow determined not to give Russia any money, according to Shokhin's words?
5. How does Shokhin see the future if the situation does not change?

**ONE MORE BOMB IN MOSCOW**

Muscovites were beginning to forget about the explosions that had rocked the city, thinking that the blown-up apartment houses in Guryanov St. and Kashirskoye shosse, and the blast in the Pushkin Square underpass were things of the past. Inquisitive individuals boldly peeped into plastic bags left behind on public transport. However, it transpired that our complacency was premature.

The explosion at the Belorusskaya metro station thundered at 6.45 p.m. on Monday at the rush hour peak when the platform was packed with people on their way home. The bomb in a shopping bag was planted under a marble bench inside the station. When it blew up, the blast and marble fragments injured ten people standing nearby, two of them children. They were all hospitalized with mild concussion and burns. Two refused to be taken to hospital. Doctors said the condition of the victims was satisfactory.

The prosecutor's office has started criminal proceeding under the Criminal Code's Article 205, Part One, "Terrorism".

As a result of a preliminary analysis, experts of the Federal Security Service Directorate for Moscow city and the Moscow region have established that the explosion device had a power equal to 200-400 grams of TNT. Further investigation is expected to reveal the design of the bomb and how it worked.

The explosive device was hidden under a bench near passage to the Belorusskaya radial line. The massive bench absorbed some of the primary impact of the explosion - it was demolished, while little damage was done to the station's interior. Some cosmetic repairs were done at the station during the night, and on Tuesday morning the Belorusskaya circle line station opened on schedule and is operating normally.

Moscow Mayor Yuri Luzhkov came to the site of the explosion later in the evening. He described it as "one hundred percent terrorist act". Afterward he told journalists who had gathered on the square in front of the Belorusskaya railway station building that the bomb had been intended to go off as a train was pulling in, but the explosion occurred several seconds earlier. "That's why, thank goodness, there are comparatively few victims," Luzhkov said. The terrorists must have

hoped that the blast would derail the train, he assumed. The mayor also drew the journalists' attention to the well organized work of the city's rescue services.

This last explosion is something of a mystery. If it is an act of terrorism it looks as if terrorists had made a mistake. Why did they use such a low-power device? Why didn't it have a shell? The previous explosions in Moscow, Chechnya, Kislovodsk, and Volgograd were obviously aimed at causing maximum destruction and killing as many people as possible.

But that didn't seem to be the purpose of the "Belorusskaya" bomb. One gets the impression that it was meant to intimidate rather than kill and destroy. The idea must have been to show that despite all the anti-terrorist measures (including constant checks of cards) it is perfectly easy to set off a TNT bomb in downtown Moscow.

The terrorists have succeeded in scaring Muscovites, who will now be on edge every time they walk into a metro station or take a bus or trolley bus. They will develop a conditional reflex to shun any bag left unattended.

### **I. Words and word combinations:**

explosion - взрыв

to rock the city - всколыхнуть город

to blow up - взорвать

to peep into plastic bags left behind on public transport - заглядывать в пластиковые пакеты, оставленные в общественном транспорте

premature complacency - преждевременное спокойствие

to thunder - прогреметь

to plant a bomb - заложить бомбу

mild concussion - легкое сотрясение мозга

to start criminal proceeding under the Criminal Code's Article 205, Part One, "Terrorism" - начать уголовное дело по статье 205 УК РФ, ч.1, «Терроризм»

to have a power equal to ...(gm, kg) of TNT - иметь мощность...(г, кг) в тротиловом эквиваленте

design of a bomb — механизм бомбы

explosive device - взрывчатое устройство

an impact of the explosion - взрывная волна

the city's rescue services - городская служба спасения

to derail a train - вызвать крушение поезда

to cause maximum destruction - нанести максимальный урон

to intimidate - запугивать

anti-terrorist measures - анти-террористические меры

to shun a bag left unattended - остерегаться сумок, оставленных без присмотра

### **II. Say whether the following statements are true or false:**

1. The bomb went off on the packed Moscow train at the rush hour peak.
2. The bomb was hidden inside the station.
3. The explosion was very powerful and led to numerous victims.
4. Metro station was not damaged heavily and continued its work the next morning.
5. Nobody was killed in the bombing.
6. The terrorists wanted to cause maximum destruction and kill as many people as possible.
7. This terrorist act differs from those that were carried out in Chechnya, Kislovodsk, Volgograd.
8. The terrorists wanted to show that all anti-terrorist measures were not effective.
9. Despite all the terrorist attacks Muscovites are not afraid of using public transport.

### **III. Choose the answer which you think fits best:**

1. Before the explosion at Belorusskaya metro station Muscovites
  - a) were sure that all explosions were the things of the past.
  - b) always shunned any bag left unattended.
  - c) had never suffered from any explosion.
2. The explosion thundered in the metro station
  - a) when there was not a soul.
  - b) at the rush hour peak.
  - c) when there were only 10 workers.
3. The bomb in a shopping bag
  - a) was put right on the rails.

- b) was planted under a marble bench.
  - c) was placed near the entrance door.
4. How many people were injured?
    - a) 5
    - b) 50
    - c) 10
  5. What power did the explosive device have?
    - a) 200-400 grams of TNT
    - b) 500-700 grams of TNT
    - c) 1000-1200 grams of TNT
  6. The Belorusskaya metro station
    - a) was completely destroyed.
    - b) was a little damaged inside.
    - c) wasn't damaged at all.
  7. Moscow Mayor Yuri Luzhkov described it as
    - a) provocation.
    - b) an accident.
    - c) one hundred percent terrorist act.
  8. The city's rescue service men
    - a) were on the spot within minutes of the blast.
    - b) arrived an hour later.
    - c) ignored the explosion.
  9. The terrorists usually aim at
    - a) causing minimum destruction and killing as many people as possible.
    - b) causing maximum destruction and killing as few people as possible.
    - c) causing maximum destruction and killing as many people as possible.
  10. The main aim of this explosion as the author considers was
    - a) to kill rather than intimidate people.
    - b) to intimidate by derailing the train.
    - c) to destroy the Belorusskaya metro station.

**IV. Find the words in the text that mean the following:**

La process of discovering and examining all the facts about smth., e.g. a crime or an accident.

2. tending to ask a lot of questions and interfere everywhere.
3. damage to smb.'s brain caused by a blow, violent shaking.
4. to work, to function.
5. to avoid smth.
6. to frighten smb. in order to make them do smth.
7. to be nervous.

**V. Insert the suitable words from the text:**

1. The police found a bomb, which had been \_\_\_\_\_ under a bus seat.
2. The victims in \_\_\_\_\_ condition were not taken to hospital.
3. The blast was supposed to \_\_\_\_\_ a train but the bomb went off earlier.
4. The \_\_\_\_\_ of the explosion was so great that the whole interior of the station was damaged.
5. The passenger called the police when he had noticed a bag left \_\_\_\_\_ in a subway car.

**VI. Answer the questions:**

1. Where did the explosion occur?
2. Did the blast kill many people? What was the effect of the bomb?
3. Why was the impact of the explosion not so strong?
4. Did the terrorists intend to cause maximum destruction? Give your reasons.
5. What was the purpose of the "Belorusskaya" bomb?

## НАУЧНЫЕ СТАТЬИ ДЛЯ ПРОСМОТРОВОГО ЧТЕНИЯ

Ознакомьтесь со следующими текстами (без словаря), перескажите их по-русски.

### WHAT IS SOLID MECHANICS?

The application of the principles of mechanics to bulk matter is conventionally divided into the mechanics of fluids and the mechanics of solids. The entire subject is often called continuum mechanics, particularly when matter is assumed to be continuously divisible and no reference is made to its discrete structure at microscopic scales well below those of the application of phenomenon of interest.

**Solid mechanics** is concerned with the stressing, deformation, and failure of solid materials and structures. What, then, is a solid? Any material, fluid or solid, can support normal forces. These are forces directed perpendicular, or normal, to a material plane across which they act. The force per unit of area of that plane is called the normal stress. Water at the base of the pond, air in an automobile tire, stones of the Roman arch, rocks at the base of the mountain, skin of a pressurized airplane cabin, a stretched rubber band, and the bones of a runner all support force in that way (some only when the force is compressive). A material is called solid rather than fluid if it can also support a substantial shearing force over the time scale of some natural process or technological application of interest. Shearing forces are directed parallel, rather than perpendicular, to the material surface on which they act; the force per unit of area is called shear stress.

### WHAT IS ECONOMICS?

Economics is often thought of either as the answers to a particular set of questions (How do you prevent unemployment? Why are prices rising? How does the banking system work? Will the stock market go up?) or as the method by which such answers are found. Neither description adequately defines economics, both because there are other ways to answer such questions (astrology, for example,

might give answers to some of the questions given above, although not necessarily the right answers) and because economists use economics to answer many questions that are not usually considered "economic" (What determines how many children people must have? How can crime be controlled? How will governments act?).

I prefer to define economics as a particular way of understanding behavior; what are commonly thought of as economic questions are simply questions for which this way of understanding behavior has proved particularly useful in the past:

**Economics is that way of understanding behavior that starts from the assumption that people have objectives and tend to choose the correct way to achieve them.**

The second half of the assumption, that people tend to find the correct way to achieve their objectives, is called rationality. This term is somewhat deceptive, since it suggests that the way in which people find the correct way to achieve their objectives is by rational analysis - analyzing evidence, using formal logic to deduce conclusions from assumptions, and so forth. No such assumption about how people find the correct means to achieve their ends is necessary.

### WHAT IS BOOKKEEPING?

There are eight steps to the bookkeeping cycle. A bookkeeper is a person that performs one or more of these steps. In large companies, for instance, the bookkeeping cycle might be divided into departments such as Accounts Receivable, Accounts Payable, or Payroll. While most often these people are referred to as "clerks", they might also be considered bookkeepers as they are "keeping the books" for a company. In small companies, the bookkeeper may perform the entire bookkeeping process, or might just enter data to give to the "accountant".

All bookkeeping steps are mechanical in nature. Bookkeeping is a regimented process usually occurring in monthly cycles consisting of entering transactions into the journals, making adjustments, and preparing reports. The Accounts Receivable Clerk may be assigned to enter all sales on account, and all payments from the customers. The Accounts Payable

Clerk's responsibility would be to enter purchase orders and checks. Again, in a small company, the same person may perform both duties.

The full-charge bookkeeper is someone who can do it all - including compiling the data into the General Ledger and preparing financial statements.

### **WHAT IS ACCOUNTING?**

Someone has to set up the bookkeeping system, monitor it, and interpret the results. These processes are called "Accounting". The accounting process is much less mechanical and more subjective. It begins with designing a system that will benefit the business, by capturing the financial information in a useful manner without being overly burdensome to the bookkeeper. Once set up, the accountant monitors the system to ensure it's doing what it's supposed to do. And finally, on a monthly basis usually, the accountant presents the financial statements to the business management in such a way that decisions can be made.

Since accounting requires an understanding of the bookkeeping process, accountants typically supervise the bookkeepers. In a large corporation there may be several, possibly even thousands of accountants. One will be designated as the "Controller" who oversees the entire accounting and bookkeeping system.

In a small business, one person, often a freelancer (a contract accountant) will perform all the phases of accounting and bookkeeping for a company. Since "Accountant" is the more prestigious title, most small business jack-of-all-trades call themselves an "Accountant".

It merits some note that a few states actually regulate the use of the title "Accountant". In these states, the "Accountant" title is reserved for CPA's only. This does not necessarily coincide with the definition of an accountant since most CPA's don't perform the role of an "Accountant" as described above and many people that perform the accountant's roles are not CPA's. Nevertheless the laws define it as such.

Universal's course trains in bookkeeping and accounting. The first module emphasizes the bookkeeping process, although it does

address the proper setup of the accounting system. Modules two and three include some bookkeeping practice, but emphasize the set up and interpretation of the accounting process.

Therefore, most of our graduates, in states that permit use of such a title, refer to themselves as "Accountants".

### **WHAT IS A MEMBRANE?**

A precise and complete definition of the word "membrane" is difficult to make ; any complete definition given to cover all the facets of membrane behavior will be inexact and any precise statement will be incomplete. It is described in simple terms as a phase, usually heterogeneous, acting as a barrier to the flow of molecular and ionic species present in the liquids and/or vapors contacting the two surfaces. The term 'heterogeneous' has been used to indicate the internal physical structure and external physicochemical performance .

From this standpoint, most membranes in general, except the obvious ones, as for example oil membranes, are to be considered heterogeneous, despite the fact that, conventionally, membranes prepared from coherent gels have been called homogeneous.

### **CLASSIFICATION OF MEMBRANES**

Membranes may be broadly classified into natural and artificial or man-made. Natural membranes existing in biological systems (biomembranes) are considered to have a fundamental unit membrane structure which is a bimolecular leaflet of lipid with their polar groups oriented toward the two aqueous, the extracellular and the intracellular, phases of the cell. Protein is supposed to exist close to the polar heads of the leaflet. However, evidence is being presented to challenge this widely accepted view. Depending on the cell system, the composition of the lipid constituting the membrane would vary while all the time retaining the same unit membrane structure. This type of universal structure is absent in artificial membranes. Eisenman et al. have given a classification of these membranes based on their structures.

## WHAT IS PROFESSIONAL ETHICS?

Professional Ethics concerns one's conduct of behavior and practice when carrying out professional work. Such work may include consulting, researching, teaching and writing. The institutionalization of Codes of Conduct and Codes of Practice is common with many professional bodies for their members to observe.

Any code may be considered to be a formalization of experience into a set of rules. A code is adopted by a community because its members accept the adherence to these rules, including the restrictions that apply.

It must be noted that there is a distinction between a *profession* such as Information Systems, and *controlled professions* such as Medicine and Law, where the loss of membership may also imply the loss of the right to practice.

Apart from codes of ethics, professional ethics also concerns matters such as professional indemnity. Furthermore, as will readily be appreciated, no two codes of ethics are identical. They vary by cultural group, by profession and by discipline. The former of these three variations is one of the most interesting, as well as controversial, since it challenges the assumption that universal ethical principles exist. In some cultures, certain behaviors are certainly frowned upon, but in other cultures the opposite may be true. Software piracy is a good case in point, in that attitudes towards software piracy vary from strong opposition to strong support - attitudes that are supportable within a particular culture.

## ПРИЛОЖЕНИЕ №1 О НАУКЕ ЯЗЫКОМ НАУКИ

### ПОСТАНОВКА ПРОБЛЕМЫ:

- |  |   |
|--|---|
| 1) <i>A much debated question in this field is...</i>                              | <i>Очень спорным вопросом в этой области является...</i>                            |
| 2) <i>It is still an open question.</i>  | <i>Это все еще нерешенный вопрос.</i>   |
| 3) <i>Some of the unsolved problems...</i>   | <i>Некоторые из неразрешенных вопросов ...</i>                                      |
| 4) <b>There are still many fundamental problems to be solved in this area.</b>     | <b>В этой области еще имеется много фундаментальных проблем, требующих решения.</b> |
| 5) <i>It poses the following problem...</i>  | <i>Это ставит следующую проблему...</i>   |
| 6) <i>This work is an attempt to show (to find, to prove, to consider) that...</i> | <i>В данной работе делается попытка показать, что...</i>                            |
| 7) <i>The present paper discusses some aspect of...</i>                            | <i>В данной работе обсуждаются некоторые аспекты...</i>                             |

### ИСТОРИЯ ВОПРОСА:

- |   |  |
|---|--|
| 1) <i>It has long been known, that...</i>                         | <i>Давно известно, что...</i>  |
| 2) <i>In view of all the known facts...</i>                       | <i>В свете всех известных фактов...</i>  |
| 3) <i>Much has been written relating to...</i>                    | <i>Много было написано о...</i>  |
| 4) <i>There is not a great deal known about...</i>                | <i>Мало, что известно об...</i>  |
| 5) <i>Little is known about...</i>                                | <i>Мало, что известно о...</i>   |
| 6) <i>Following the early work...</i>                             | <i>Вслед за более ранней работой...</i>  |
| 1) <b>Only limited studies have been made up to the present.</b>  | <b>До настоящего времени изучение (данного материала) было неполным.</b>       |
| 8) <i>By the time of writing no complete review has appeared.</i> | <i>К моменту написания данной статьи еще не было полного обзора материала.</i> |
| 9) <i>In the near future.</i>                                     | <i>В ближайшем будущем...</i>  |

### ОБЗОР ЛИТЕРАТУРЫ:

- |   |   |
|---|---|
| 1) <i>Extensive bibliography in this field has accumulated.</i> | <b>В этой области накопилась обширная библиография.</b>   |
| 2) <b>There is an enormous literature on this subject.</b>      | <b>Имеется обширная литература по данному вопросу.</b>    |
| 3) <i>A large body of literature exists on this subject.</i>    | <b>По данному вопросу существует обширная литература.</b> |

4) *A fairly extensive set of key references will be found here.*

5) *Details may be found in standard reference books.*

6) *According to some authors...*

7) *All subjects are discussed within the covers of this book.*

Здесь можно найти достаточно обширные ссылки по основным вопросам.

Подробности можно найти в стандартных справочниках.

Согласно некоторым авторам...

На страницах этой книги обсуждаются все вопросы.

### ОЦЕНКА ЛИТЕРАТУРЫ:

1) *The literature contains an abundance of conflicting opinions.*

2) *On reviewing the literature it may be stated that...*

3) *Recent reviews leave the reader under the impression that...*

4) *As a result of his literature survey, he proposed that...*

5) *The first detailed theory was put forward some 60 years ago...*

6) *Most of the work discussed has in fact appeared in the past twenty years.*

1) *Recent years we have seen the accumulation of new facts in this field.*

В литературе (по данному вопросу) очень много противоречивых мнений. Из обзора литературы можно установить, что...

Последние обзоры создают у читателей впечатление, что...

В результате анализа литературы он предложил...

Первая детально разработанная теория была выдвинута приблизительно 60 лет назад.

Большинство обсуждаемых работ появилось фактически за последние 20 лет.

За последние годы мы видели накопление новых фактов в этой области.

### ЗАДАЧИ И ЦЕЛИ ИССЛЕДОВАНИЯ:

1) *We are concerned with interpreting...*

2) *This important and difficult task still confronts us.*

3) *It is the purpose of the present communication to demonstrate that...*

4) *The next aim was to decide whether...*

5) *Further work is in order to settle this question.*

6) *It is the object of a very thorough study.*

Нашей задачей является объяснение...

Эта важная и трудная задача еще стоит перед нами.

Целью данного сообщения является показать, что...

Затем надо было решить...

Требуется дальнейшая работа, чтобы решить этот вопрос.

Это является предметом тщательного изучения.

### ИЗУЧЕНИЕ, ИССЛЕДОВАНИЕ:

1) *Close study reveals that...*

2) *Detailed study is in process.*

3) *This field is under active investigation now.*

4) *Some beginnings have been made in this direction.*

5) *Numerous efforts were undertaken to...*

Тщательное изучение показывает, что...

Сейчас ведется тщательное исследование.

Эта область интенсивно исследуется в настоящее время.

Несколько первоначальных исследований было сделано в этом направлении.

Были сделаны многочисленные попытки...

### РЕШЕНИЕ ПРОБЛЕМЫ:

1) *In approaching this problem it is important to keep in mind that...*

2) *The whole problem was clarified when...*

3) *Many investigators unraveled this problem step by step.*

4) *Some order may be introduced into this problem.*

5) *Several ingenious solutions have been suggested.*

При подходе к этой проблеме важно не забывать, что...

Вся проблема стала яснее, когда...

Многие исследователи решали эту проблему шаг за шагом.

Эту проблему можно в известной степени упорядочить.

Было предложено несколько остроумных решений.

### РАССМОТРЕНИЕ РЕЗУЛЬТАТОВ:

1) *It should be stressed that...*

2) *// should be reemphasized that...*

3) *In a view of the example just cited...*

4) *The field under discussion can best be understood if...*

5) *Attention should be called to the work of...*

6) *One is immediately struck by the possibility that...*

7) *In the discussion of this problem one should mention the history of the discovery.*

8) *An attempt will be made to summarize the results.*

9) *Our results could be interpreted*

Следует подчеркнуть, что...

Следует еще раз подчеркнуть, что...

Учитывая вышеприведенные примеры...

Обсуждаемый раздел можно лучше понять, если...

Следует обратить внимание на работу...

Сразу поражает возможность того, что...

При обсуждении этой проблемы надо упомянуть историю открытия.

Будет сделана попытка суммировать результаты.

Наши результаты можно было бы



by the suggested model.

10) The findings help to explain...

11) Our understanding of those fundamental processes is sufficiently advanced.

12) No fully satisfactory explanation has yet been given to this fact.

объяснить с помощью предлагаемой модели.

Эти результаты помогают объяснить...

Мы достаточно далеко продвинулись в понимании этих основных процессов.

Этот факт еще не получил вполне удовлетворительного объяснения.

### МЕТОДЫ ИССЛЕДОВАНИЯ:

general	обычный
commonly employed	широкоприменяемый
reliable	надежный
main	основной
convenient	удобный
suitable	подходящий
satisfactory	удовлетворительный
sensitive	чувствительный
fast	быстрый
elegant, fine	изящный
(in)applicable	(не) пригодный
new	новый
allied	близкий
(in)noxious	(без) вредный
elaborate	сложный
laborious	трудоемкий
modern	современный

### ПРИМЕНЕНИЕ МЕТОДА:

1) This method is applicable to...

2) // is now customary to use this technique.

3) This method was originally designed for...

4) This method is considerably simplified by the use of...

5) The use of classical methods has been discouraged.

Данный метод пригоден для...

Теперь стало обычным применять эту методику.

Данный метод был первоначально разработан для...

Данный метод значительно упрощен благодаря применению...

Применение классических методов не было одобрено.

### ОСОБЕННОСТИ, ДОСТОИНСТВА И ОГРАНИЧЕНИЯ МЕТОДОВ:

1) The special advantage of the method is that it can be applied to...

2) This method is completely satisfactory for...

3) This method is especially suited to routine analyses.

4) This method is entirely unsuitable for...

5) This method has its limitations for...

Особое преимущество метода заключается в том, что он может быть использован для...

Этот метод вполне удовлетворителен для...

Этот метод особенно подходит для (проведения) повседневных анализов.

Этот метод совершенно непригоден для...

Этот метод имеет свои ограничения для...

### ТЕРМИНОЛОГИЯ:

1) By this term we mean...

2) The usage of this term is incorrect and is better avoided.

3) The term has been broadened.

4) The use of this term can be justified if we keep in mind that...

Под этим термином мы подразумеваем...

Этот термин используется неправильно, и его лучше избегать.

Значение термина было расширено.

Использование этого термина будет оправдано, если мы будем помнить, что...

**ПРИЛОЖЕНИЕ № 2  
ПЛАН ПЕРЕСКАЗА ГАЗЕТНОЙ СТАТЬИ**

<b>1. THE TITLE OF THE ARTICLE</b>	<b>НАЗВАНИЕ СТАТЬИ</b>
The article is head-lined...	Статья озаглавлена...
The head-line of the article I have read is...	Название статьи, которую я прочитал...
The article under the head-line, the heading...	Статья под заголовком...
<b>2. THE AUTHOR OF THE ARTICLE, WHERE AND WHEN THE ARTICLE WAS PUBLISHED</b>	<b>АВТОР СТАТЬИ, МЕСТО И ВРЕМЯ ОПУБЛИКОВАНИЯ</b>
The newspaper (a daily, a weekly, a monthly) carries an article devoted to...	В газете (ежедневной, еженедельной, ежемесячной) помещается статья, посвященная...
The article is (was) published in (printed in) Moscow News which dates back (to) February 12.	Статья была напечатана в...
The article is written by...	Статья написана...
In the issue of March 4 the M.N.	В номере от 4 марта «М.Н.»
<b>3. THE MAIN IDEA OF THE ARTICLE</b>	<b>ОСНОВНАЯ ИДЕЯ СТАТЬИ</b>
The key note (essence, gist, core, main idea) of the article...	Основная идея статьи состоит в том...
The article is devoted to...	Статья посвящена...
The article deals with...	Статья посвящена...
The article dwells upon...	Статья касается...
The article touches upon...	
The article centers round...	
The purpose of the article is to give the reader some information on...	Цель статьи - представить читателю информацию о...
The aim of the article is to provide the reader with some material (data) on...	Цель статьи - обеспечить читателя материалом (данными) о...

**4. THE CONTENTS OF THE ARTICLE, SOME FACTS, NAMES, FIGURES**

The author starts by telling the reader about (that)...

According to the text...

Further the author reports that...

The author quotes from what smb said in 19...

The author effectively discloses (exposes, lays bare) all the myths.

The author may believe (think, hold, claim, argue) that...

to declare smth or that

to state smth or that

to describe smth

to announce smth or that

to point out that...

to outline smth

to admit that

to underline that...

to emphasize...

to demand smth

to condemn smth (smb)

to denounce smth (smb)

to express conviction that...

to doubt smth

to refute smth

to call on smb to do smth

to be bound to point out in conclusion

the author comes to the conclusion that...

**5. YOUR OPINION OF THE ARTICLE**

*/ found the article*

interesting

informative

important

dull

of no value

too hard to understand

**СОДЕРЖАНИЕ СТАТЬИ, НЕКОТОРЫЕ ФАКТЫ, ИМЕНА, ЦИФРЫ**

В начале автор рассказывает читателю о (что)...

Согласно тексту...

Далее автор сообщает, что...

Автор цитирует высказывание кого-либо, сделанное в...

Автор разоблачает миф.

Автор может считать, полагать, что...

заявлять что-либо

заявлять что-либо

характеризовать что-либо

объявлять что-либо

указывать, что...

излагать что-либо

признавать что-либо

подчеркивать что-либо

подчеркивать что-либо

требовать что-либо

осуждать, обвинять кого-либо

осуждать, разоблачать

выражать уверенность, что...

сомневаться в чем-либо

опровергать что-либо

призывать кого-либо сделать что-либо

быть вынужденным заявить в заключении...

автор приходит к выводу, что...

**ВАШЕ МНЕНИЕ О СТАТЬЕ**

*Я считаю статью*

интересной

информативной

важной

скучной

не представляющей ценности

трудной (для понимания)

**ПРИЛОЖЕНИЕ № 3**  
**ПРАВИЛА ЧТЕНИЯ ХИМИЧЕСКИХ ФОРМУЛ**

Буквы латинского алфавита, обозначающие названия элементов, читаются согласно английским названиям букв алфавита.

Знак + читается plus, and, together with, react with.

Знак - обозначает одну связь или единицу родства и не читается.

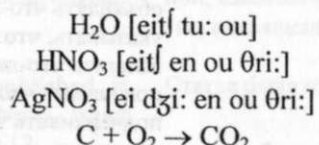
Знак = читается give, form или produce.

Знак → читается give, pass over или lead to.

Знак ↔ читается forms and is formed from.

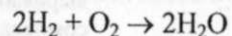
Цифра (внизу) после названия элемента обозначает число атомов в молекуле.

Цифра перед названием элемента обозначает число молекул.



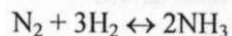
C plus O two give CO two [si: plʌs ou tu: giv si: ou tu:]

*wiu*: 1 atom of carbon reacts with 1 two-atom molecule of oxygen and produces 1 molecule of carbon dioxide.



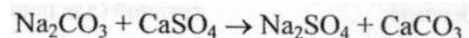
Two molecules of H two plus O two give two molecules of H two O [tu: 'mɒlikju:lz əv eit] tu: plʌs ou tu: giv tu: 'mɒlikju:lz əv eit] tu: ou]

*или*: Two two-atom molecules of hydrogen react with 1 two-atom molecule of oxygen and produce two molecules of water.



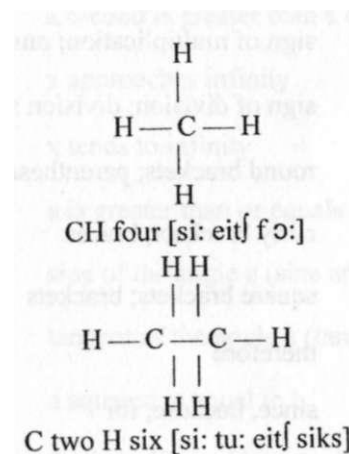
N two plus three molecules of H two form and are formed from two molecules of NH three [en tu: plʌs θri: 'mɒlikju:lz əv eit] tu: fɔ:m ənd a: fɔ:md frəm tu: 'mɒlikju:lz əv en eit] θri:]

*wiu*: 1 two-atom molecule of nitrogen plus three two-atom molecules of hydrogen form and are formed from two molecules of ammonia.

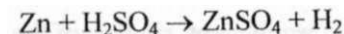


Na two CO three plus CaSO four form Na two SO four plus CaCO three [en ei tu: si: ou θri: plʌs si: ei es ou fɔ: fɔ:m en ei tu: es ou fɔ: plʌs si: ei si: ou θri:]

*или*: The sodium (Na) and the calcium (Ca) switch places. The sodium combines with the sulphate radical (SO<sub>4</sub>) forming sodium sulphate (Na<sub>2</sub>SO<sub>4</sub>) which dissolves in water. The calcium combines with the carbonate radical (CO<sub>3</sub>) forming calcium carbonate (CaCO<sub>3</sub>). Calcium carbonate does not dissolve in water, and so settles to the bottom of the solution.



*Reading an equation:*



The + sign on the left of the arrow means "reacts with"; the arrow means "forming" or "producing"; and the + sign on the right of the arrow means "and".

So this equation is read as: "One atom of zinc reacts with one molecule of sulphuric acid producing one molecule of zinc sulphate and one molecule of hydrogen".

**ПРИЛОЖЕНИЕ № 4**  
**ПРАВИЛА ЧТЕНИЯ ОСНОВНЫХ**  
**МАТЕМАТИЧЕСКИХ ФОРМУЛ**

1. +	plus
2. -	minus
3. ±	plus or minus
4. x	sign of multiplication; multiplication sign
5. : ÷	sign of division; division sign
6. ( )	round brackets; parentheses
7. { }	curly brackets; braces
8. [ ]	square brackets; brackets
9. ∴	therefore
10. ∵	since, because, for
11. $\dot{=}$	approaches; is approximately equal
12. ~	equivalent, similar; of the order of
13. $\cong$	is congruent to; is isomorphic to
14. $\propto$	varies directly as
15. $a = b$	a equals b; a is equal to b
16. $a \neq b$	a is not equal to b; a is not b
17. $a \approx b$	a approximately equals b

18. $a \pm b$	a plus or minus b
19. $a > b$	a is greater than b
20. $a \gg b$	a is substantially greater than b
21. $a < b$	a is less than b
22. $a \ll b$	a is substantially less than b
23. $a_2 > a_d$	a second is greater than a d-th
24. $x \dot{=} \infty$	x approaches infinity
25. $x \rightarrow \infty$	x tends to infinity
26. $a \geq b$	a is greater than or equals b
27. $\sin a = a$	sine of the angle a (sine angle a) is equal to a
28. $\tan a$	tangent of the angle a (tangent angle a)
29. $a^2 = b$	a squared is equal to b
30. $\log_a b = c$	the logarithm of b to the base a is equal to c
31. $a = \frac{e}{1}$	a is equal to the ratio of e to one
32. $\frac{ab^2}{b} = ab$	ab square (divided) by b equals ab
33. $\frac{a}{\infty} = 0$	a) a divided by infinity is infinitely small b) a by infinity is equal to zero
34. $\frac{x \pm \sqrt{x^2 - y^2}}{y}$	x plus or minus square root of x square minus y square all over y

**ПРИЛОЖЕНИЕ № 5**  
**ЕДИНИЦЫ ИЗМЕРЕНИЯ (UNITS OF MEASUREMENT)**

**Меры длины (Linear Measures)**

Дюйм	inch	in.	2.54 cm
Фут	foot	ft (12 ft.)	30.48 cm
Ярд	yard	yd (3 ft.)	91.44 cm
Миля	mile	mi. (1760 yd)	1609.33 m
Миля морская	nautical mile	naut.mi. (6080 ft)	1853.18 m

**Меры веса (Measures of Weights)**

Драхма	dram	dr.	1.77 g
Унция	ounce	oz (16 dr.)	28.35 g
Фунт	pound	lb. (16 oz)	453.59 g
Стон	stone	st. (14 lb.)	6.35 kg
Квартер	quarter	qr (28 lb.)	12.7 kg
Центнер	hundredweight	hwt (112 lb.)	50.8 kg
Тонна большая	ton	t (20 hwt)	1016.048 kg

**Меры объема жидких и сыпучих тел (Measures of Volume)**

Джил	gill	-	0.14 l
Пинта	pint	pt (4 gills)	0.57 l
Кварта	quart	qt (2 pt)	1.14 l
Галлон	gallon	gal. (4 qt)	4.55 l
Бушель	bushel	bsh. (8 gal.)	36.37 l
Квартер	quarter	qr (8 bsh.)	290.94 l

**Меры площади (Square Measures)**

Кв. дюйм	square inch	sq.in.	6.45 cm <sup>2</sup>
Кв. фут	square foot	sq.ft (144 sq.yd)	9.29 dm <sup>2</sup>
Кв. ярд	square yard	sq.yd (9 sq.ft)	0.836 m <sup>2</sup>
Акр	acre	ac. (4840 sq.yd)	0.4 hectare
Кв. миля	square mile	sq.mi. (640 ac.)	2.59 km <sup>2</sup>

**Меры объема (Cubic Measures)**

Куб. дюйм	cubic inch	c.in.	16.39 cm <sup>3</sup>
Куб. фут	cubic foot	cu.ft (1728 c.in.)	28.32 dm <sup>3</sup>
Куб. ярд	cubic yard	c.yd (27 cu.ft)	764.53 dm <sup>3</sup>
Тонна регистровая	register ton	reg.t. (100 cu.ft)	2.83 m <sup>3</sup>

**Time**

60	seconds	=	1 minute
60	minutes	=	1 hour
24	hours	=	1 day
7	days	=	1 week

**Angles**

60	seconds (60")	=	1 minute (Г)
60	minutes (60')	=	1 degree (1°)
90	degrees (90°)	=	1 right angle
360	degrees (360°)	=	1 circle
4	right angles	=	1 circle

## ОБРАЗЕЦ ОФОРМЛЕНИЯ РЕФЕРАТА

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### РЕФЕРАТ

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математического моделирования  
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Краснодар 2006

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