

**МИНИСТЕРСТВО ОБРАЗОВАНИЯ И НАУКИ РОССИЙСКОЙ ФЕДЕРАЦИИ  
ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ ОБРАЗОВАТЕЛЬНОЕ  
УЧРЕЖДЕНИЕ ВЫСШЕГО ОБРАЗОВАНИЯ**

**«САНКТ-ПЕТЕРБУРГСКИЙ ГОСУДАРСТВЕННЫЙ  
УНИВЕРСИТЕТ ПРОМЫШЛЕННЫХ ТЕХНОЛОГИЙ И ДИЗАЙНА»**

**ВЫСШАЯ ШКОЛА ТЕХНОЛОГИИ И ЭНЕРГЕТИКИ**

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# **АНГЛИЙСКИЙ ЯЗЫК**

**Учебно-методическое пособие  
по развитию интерактивных навыков  
устной речи**

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Цель настоящего пособия – развитие интерактивных навыков устной речи студентов I и II курсов всех направлений подготовки.

Пособие содержит несколько тем монологических высказываний, а также лексические и лексико-грамматические упражнения, направленные на активизацию лексики и лексико-грамматических конструкций.

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## **Предисловие**

Настоящее пособие предназначено для студентов I-II курсов Высшей школы технологии и энергетики Санкт-Петербургского государственного университета промышленных технологий и дизайна.

Цель пособия – развитие интерактивных навыков устной речи.

Пособие включает несколько тем, касающихся жизни и учебы студентов, общей характеристики Высшей школы технологии и энергетики, особенностей отдельных специальностей данного вуза, а также информации об истории Санкт-Петербурга. Каждая тема содержит основной текст и ряд упражнений, которые направлены на запоминание и активизацию лексики и лексико-грамматических конструкций. В упражнениях практикуется вопросно-ответная форма и пересказы, развивающие навыки связного высказывания.

## I'M A FIRST-YEAR STUDENT

My name's Ivan Petrov. I'm a first-year student of the Higher School of Technology and Power Engineering of Saint Petersburg State University of Industrial Technologies and Design. I'm a student of its integral part – the Institute of Technology (the Institute of Power Engineering and Automation, the Institute of Innovative Management Technologies).

I'm a full-time student (a part-time student).

I got interested in chemistry (mathematics, economics) when I was at the secondary school and now it's my favourite subject. I think I'm good at it. It's also the key subject at our institute.

The first-year students study mathematics, physics, the history of Russia, technical drawing, informatics, a foreign language and some other subjects. My weak point is English. I have to work hard at it in order not to lag behind the group.

We have lectures, classes and work in the laboratories. As a rule we have three or four lectures a day. Our lectures begin at 9.30. So I have to get up very early in order not to be late for them. I go to the Higher School by underground (by bus). It takes me about an hour to get there. We try not to miss classes and lectures. We usually take notes at the lectures as it will be easier to read up for our exams. We'll have our exams in January and then we'll have vacations.

It's very interesting to study new subjects, but it's not always easy to work regularly.

There are 15 students in our group. Many of them live in the student hostel. It's not far from the Higher School and they walk there.

We have to study hard so we don't have free time on week days. At weekends we go to the cinema, theatre, museums, exhibitions, or to a disco.

## Словарный минимум к тексту

integral (a) [ˈɪntɪgrəl] неотъемлемый

part (n) [pɑ:t] часть

a full-time student (n) – студент дневного обучения  
a part-time student (n) – студент вечернего обучения  
favourite (a) [ˈfeɪv(ə)rɪt] любимый  
subject (n) [ˈsʌbdʒɪkt] предмет  
technical drawing (n) [ˌtekɪnɪk(ə)l ˈdɹɔːɪŋ] черчение  
a weak point (n) [ˌwiːk ˈpɔɪnt] слабое место  
in order to (prep) – чтобы  
lecture (n) [ˈlektʃə] лекция  
class (n) [klɑːs] практическое занятие  
take notes (v) [teɪk ˈnəʊts] делать записи, конспектировать  
read up for (v) [ˌriːd ˈʌpfɔː] готовиться к (экзамену)  
student hostel (n) [ˈstjuːd(ə)nt ˌhɒstl] студенческое общежитие  
lag behind (v) [ˌlæɡ bɪ ˈhaɪnd] отставать от

## Упражнения

### 1. Прочитайте диалоги. Переведите и воспроизведите их.

#### Dialogue 1

- A. What Higher School do you study at?  
B. I'm a student of the Higher School of Technology and Power Engineering. And you?  
A. I study at the Saint Petersburg University. So, you are a future technology engineer?  
B. Yes. I have always liked chemistry. And what will your future profession be?  
A. Philology. I study the English language. What year are you in?  
B. I'm a first-year student. And what year student are you?  
A. I'm a second-year student. I'm not a full-time, but a part-time student. I work and in the evening I go to the University.  
B. How many times a week do you have your lectures?  
A. Four times a week and two lectures a day.

B. Is it hard to be a part-time student?

A. Yes, I have free time neither on weekdays, nor at weekends.

B. Good luck then. I don't want to delay you anymore.

### **Dialogue 2**

A. What subjects do you study at the first year?

B. We study chemistry, mathematics, physics, technical drawing, informatics, a foreign language, the history of Russia and some others.

A. What is your favourite subject?

B. It is chemistry. It is also the key subject at our Institute. I got interested in chemistry when I was at the secondary school.

A. How many lectures or classes do you have a day?

B. We have lectures, classes and work in the laboratories. As a rule we have three or four lectures a day.

A. When do they begin?

B. As a rule at 9.30. But sometimes we begin at 11 o'clock.

A. So, you are a full-time student. How long does it take you to get to the Higher School?

B. Oh, I live quit near, so I go there on foot.

## **THE HIGHER SCHOOL OF TECHNOLOGY AND POWER ENGINEERING**

The Higher School of Technology and Power Engineering was founded in 1931. In the past it trained different specialists for the pulp and paper industry. Some years ago its structure was modernized. Today the Higher School of Technology and Power Engineering has become a part of Saint Petersburg State University Industrial Technologies and Design.

There are 4 educational Institutes at our Higher School:

1. the Institute of Technology which trains engineers of different specializations for the pulp and paper industry;
2. the Institute of Power Engineering and Automation which trains qualified engineers capable of operating the most complicated up-to-date technological processes, who are competent in applying modern kinds of equipment;
3. the Institute of Innovative Management Technologies which trains engineers-economists who can supervise all kinds of problems connected with the management of industrial manufacturing from the economic point of view;
4. the Institute of Part-Time and Distance Education. These two types of education train the same specialists as the full-time education, and the graduates get the same diploma at the end of their studies.

So there are full-time, part-time students and students of distance education.

At the Higher School of Technology and Power Engineering the education is realized by different chairs, where qualified lecturers, assistant professors and professors deliver lectures, direct classes and carry out laboratory works. Every theoretical course is followed by practical training. The course of studies lasts 4 and 6 years. The first- and second-year students study general engineering subjects. In the third year the students begin to study specialized subjects.

The final year is devoted to the graduation project which is submitted to the State Examination Commission.

The academic year begins on the 1<sup>st</sup> of September and is divided into two terms. The students take exams at the end of each term. If the results of the examinations are good, the students get grants.

Recently the Higher School of Technology and Power Engineering has switched to 2-level education programs. The students study according to Bachelor's (4 years of full-time education) and Master's (two years more of full-time education) programs. At the end of their studies the students are granted Bachelor's and Master's diplomas.

## Словарный минимум к тексту

- higher school (n) [ˈhaɪə ,sku:l] высшая школа
- power engineering (n) [ˈpaʊə ,endʒɪˈni(ə)ɡɪŋ] – энергетика
- found (v) [faʊnd] основать
- train (v) [treɪn] готовить, учить
- pulp (n) [pʌlp] целлюлоза
- paper (n) [ˈpeɪpə] бумага
- become (v) [bɪˈkʌm] становиться
- part (n) [pɑ:t] часть
- educational (a) [ˌedʒvˈkeɪʃ(ə)nəl] учебный
- qualified (a) [ˈkwɒlɪfaɪd] квалифицированный
- operate (v) [ˈɒpəreɪt] управлять
- complicated (a) [ˈkɒmplɪkeɪtɪd] сложный
- up-to-date (a) [ˌʌptəˈdeɪt] современный
- apply (v) [əˈplaɪ] применять
- kind (n) [kaɪnd] вид
- equipment (n) [ɪˈkwɪpmənt] оборудование
- innovative (a) [ɪˈnɒveɪtɪv] инновационный
- supervise (v) [ˈs(j)u:pəvaɪz] контролировать
- connect (v) [kəˈnekt] связывать
- manufacturing (n) [ˌmænʃvˈfæktʃ(ə)ɡɪŋ] производство
- point of view (n) [ˌpɔɪntəvˈvju:] точка зрения
- part-time education [ˌpɑ:tˈtaɪm ,edʒvˈkeɪʃ(ə)n] вечерняя форма обучения
- distance education [ˈdɪst(ə)ns ,edʒvˈkeɪʃ(ə)n] заочное форма обучения
- full-time education [ˌfʊlˈtaɪm ,edʒvˈkeɪʃ(ə)n] дневная форма обучения
- full-time student [ˌfʊlˈtaɪmˈstju:d(ə)nt] студент дневной формы обучения
- part-time student [ˌpɑ:tˈtaɪmˈstju:d(ə)nt] студент вечерней формы обучения
- student of distance education [ˈstju:d(ə)nt əvˈdɪst(ə)ns ,edʒvˈkeɪʃ(ə)n] студент заочной формы обучения
- chair (n) [tʃeə] кафедра



lecturer (n) [ˈlektʃ(ə)rə] преподаватель, ассистент  
assistant professor (n) [ə,sɪst(ə)nt prəˈfesə] доцент  
professor (n) [prəˈfesə] профессор  
deliver lectures [dɪˈlɪvəˈlektʃəz] читать лекции  
course (n) [kɔ:s] курс (лекций, обучения)  
training (n) [ˈtreɪnɪŋ] подготовка  
subject (n) [ˈsʌbdʒɪkt] предмет  
year (n) [jɪə] курс (обучения)  
last (v) [lɑ:st] длиться  
devote (v) [dɪˈvəʊt] посвящать  
graduation project (n) [ˌɡrædʒuˈeɪʃ(ə)nˈprɒdʒekt] дипломная работа  
submit (v) [səbˈmɪt] предоставить (комиссии)  
grant (n) [ɡrɑ:nt] стипендия  
recently (adv) [ˈri:s(ə)ntli] недавно  
switch (v) [swɪtʃ] переключиться  
level (n) [ˈlev(ə)l] уровень  
according to (prep) [əˈkɔ:dnɪŋtə] согласно  
bachelor (n) [ˈbætʃ(ə)lə] бакалавр  
master (n) [ˈmɑ:stə] магистр  
term (n) [tɜ:m] семестр

## Упражнения

### 1. Переведите следующие словосочетания на английский язык.

Высшая школа технологии и энергетики, целлюлозно-бумажная промышленность, модернизировать структуру, стать частью (войти в состав), Санкт-Петербургский государственный университет промышленных технологий и дизайна, учебный институт, институт технологии, институт энергетики и автоматизации, готовить квалифицированных специалистов, управлять технологическим процессом, сложный современный процесс, применять современное оборудование, институт инновационных методов

управления технологическими процессами, контролировать производство, с экономической точки зрения, вечернее и заочное обучение, дневное обучение, различные кафедры, ассистенты, доценты, профессора, читать лекцию, руководить практическими занятиями и лабораторными работами, курс обучения, общие технические предметы, студент первого курса, дипломная работа, двухуровневая программа обучения, получить диплом бакалавра/магистра, получать образование.

## **2. Дополните следующие предложения.**

- 1) I study at...
- 2) I'm a first-year student of...
- 3) I don't work, I'm....
- 4) My friend's a worker, he's a...
- 5) Those who live far from Saint Petersburg have the possibility...
- 6) There are four educational Institutes at our Higher School...
- 7) The education is realized by different...
- 8) Every theoretical course is followed by....
- 9) Our Higher School has switched to...
- 10) The Bachelor's program is...
- 11) The Master's program is...
- 12) At the end of the studies the students are granted...

## **3. Заполните пропуски нужными вопросительными словами.**

- 1) ... do you study?
- 2) ... Institute do you study at?
- 3) ... year are you in?
- 4) ... did you enter the Higher School of Technology and Power Engineering?
- 5) ... kinds of studies are there at the Higher School?
- 6) ...years does the course of study last?

- 7) ... education programs has the Higher School of Technology and Power Engineering switched to?
- 8) ... scientific degrees do the students get at the end of their studies?  
(What (5), When, Where, How many)

#### **4. Заполните пропуски необходимыми предложениями.**

- 1) The Higher School ... Technology and Power Engineering was founded ... 1931.
- 2) In the past it trained different specialists ... the pulp and paper industry.
- 3) The Institute ... Technology trains engineers ... different specializations.
- 4) These engineers are capable ... operating the most complicated up-to-date technological processes.
- 5) They are competent ... applying modern equipment.
- 6) The engineers-economists are able to supervise all kinds of problems connected ... the management ... industrial manufacturing ... the economic point of view.
- 7) The Higher School of Technology and Power Engineering has switched ... 2-level education programs.
- 8) The student study according ... Bachelor's and Master's programs.
- 9) ... the end ... their studies the students are granted Bachelor's and Master's diplomas.

#### **5. Спросите у Вашего знакомого.**

where he studies, what year s/he is, whether s/he is a part-time/full-time student or a student of distance education, what Institutes there are at the Higher School, how education at the Higher School is realized, whether there are many laboratories in the Higher School, how they are equipped, whether there are many qualified lecturers, what his specialization will be, according to what level program s/he studies.

## 6. Прочитайте диалоги и воспроизведите их.

### Dialogue 1

Peter: What is your name?

Ann: My name is Ann Ivanova. And what is your name?

Peter: My name is Peter Smirnov. Are you a student?

Ann: Yes, I study at the Higher School of Technology and Power Engineering.

Peter: So do I. I'm a student of this Higher School. What Institute do you study at?

Ann: I'm a first-year student of the Institute of Technology. I'm a part-time student. Do you study in the evening too?

Peter: No, I'm a fourth-year student of the Institute of Power Engineering and Automation. I'm a full-time student. So, do you have to work?

Ann: Yes, I'm a laboratory assistant at the chair of technology at our Higher School.

Peter: Do you have your lectures every day?

Ann: Four times a week: Monday, Tuesday, Thursday and Friday.

Wednesday, Saturday and Sunday are my free days. And you?

Peter: We have our lectures and classes every day except Sunday.

### Dialogue 2

Mary: How large is your family?

Ann: We are four: my mother, my father, my sister and I.

Mary: Is it your elder sister?

Ann: No, she is 5 years younger than me. She is in the eight's form at school. And what about you? Do you have any brothers or sisters?

Mary: Yes, I have an elder brother. He is a worker. How old are you?

Ann: I'm 19.

Mary: What are your parents?

Ann: My mother is a doctor and she works at a hospital. My father is an employee at Kirov plant. Do you live with your parents?

Mary: No, my family lives in Vologda, this is my native town. My mother, my father and my brother live with my grand-parents. I live in the student hostel on Trefolev Street.

### **Dialogue 3**

Ann: Good morning, Paul. Did you have your exam in chemistry?

Paul: Yes, I did.

Ann: And what did you get?

Paul: I got a four.

Ann: You are lucky. I haven't passed all my credit tests yet. That's why I'm not admitted to the end-of-term exams.

Paul: And what is your weak point?

Ann: It is my English. At the secondary school I was a poor student in English too.

Paul: So, don't waste your time. As for me, I'm getting ready for the next Exam in Physics.

Ann: Good luck! I have already written the control paper and now I'm learning the basic vocabulary. I hope to pass it today.

### **Dialogue 4**

Teacher: Today I'm satisfied with your answer. It seems to me, that three days ago you came to the examination without revising all the program.

Student: Yes. And this resulted in my failing it. I missed a lot of lectures during the last term and couldn't catch up with my group.

Teacher: I spoke to your dean about it.

Student: Yes. I was called to the dean's office and had a disagreeable talk with the dean.

Teacher: Well, let us hope that now everything will be alright and you will be able to receive your Bachelor's diploma in time. Give me your record book, I'll sign it.

### **Dialogue 5**

Paul: Excuse me, please.

Passer-by: Yes?

Paul: Could you tell us how to get to the nearest underground station?

Passer-by: Well, go down the street and then take the second turn to the left.

Paul: Is it very far? I mean, how long will it take us to walk there?

Passer-by: About 5 minutes.

Paul: Thank you.

Passer-by: You are welcome.

### **Dialogue 6**

Paul: Excuse me, is anybody sitting here?

Ann: No. Oh, I'll just move my bag.

Paul: Thanks a lot. And could you tell me the time. I'm afraid I may be late for my English now.

Ann: I hope we have some minutes left.

Paul: That's fine. Are you a first-year student? I think we have met before. I'm Paul. I think we live in the same hostel.

Ann: Yes, you are right. My name is Ann. Meet my friend Yulia, she is from Vologda.

Paul: Nice to meet you. Ah, now it's the time. I hope to see you both in our video club tonight. A new film is on. See you later.

Ann: So long.

Yulia: So long.

## Dialogue 7

Paul: Hello! Can I speak to Yulia?

Yulia: That's me.

Paul: It's Paul speaking. How are you?

Yulia: Fine, thank you. How are things with you?

Paul: Not bad. I was thinking of going to the cinema this evening. Would you like to come?

Yulia: That'd be lovely. But I'm busy tonight. My parents are expecting some visitors and I have promised to help them. Perhaps some other time.

Paul: What about tomorrow? I'll try to buy tickets and give you a ring.

Yulia: That's a good idea.

Paul: Settled then. Bye-bye.

Yulia: Bye-bye!

### 7. Переведите следующие предложения на английский язык.

- 1) Я учусь в Высшей школе технологии и энергетики.
- 2) Я студент первого курса Института технологии.
- 3) В нашей Высшей школе есть еще три института: институт энергетики и автоматизации, институт инновационных управленческих технологий, институт вечернего и заочного обучения.
- 4) Занятия проходят в дневное время, вечернее время и заочно.
- 5) В нашей Высшей школе существует двухуровневое образование.
- 6) Студенты, которые учатся по программе для бакалавров, занимаются 4 года и в конце получают диплом бакалавра.
- 7) Студенты, которые учатся по программе для магистров, занимаются на 2 года больше и получают диплом магистра.

## MY FUTURE OCCUPATION

The Institute of Technology (for technology engineers and mechanical engineers)

I study at the Higher School of Technology and Power Engineering of Saint Petersburg State University of Industrial Technologies and Design. I am a student of its integral part – the Institute of Technology. I am a future technology engineer (mechanical engineer).

Our Institute trains engineers of different specializations:

- technology of chemical wood processing;
- technology and design of packaging manufacturing;
- technology of industrial waste recovery;
- technological machines and equipment.

The graduates of our Institute work as technology engineers and mechanical engineers at numerous integrated pulp and paper mills or industrial timber complexes. Many of them work at research or design centres.

The pulp and paper industry is one of the most important industries of every national economy. It's difficult to imagine modern life without pulp and paper. Paper greatly contributes to culture and civilization of people. The number of products manufactured from paper and board is immense.

Our institute trains highly qualified engineers capable of operating the most complicated up-to-date technological processes highly competent in applying all kinds of equipment.

I think that my future work is not easy but absolutely necessary for our national economy.

### Словарный минимум к тексту

integral (a) [ˈɪntɪgrəl] неотъемлемый

technology (n) of wood processing [tekˈnɒlədʒi əv wʊdˈprɒsɛsɪŋ]

технология обработки древесины



technological design of packaging manufacturing [ˌtek.nəˈlɒdʒɪk(ə)l dɪˈzaɪn əv ˈpækɪdʒɪŋ ,mænjʊˈfæktʃ(ə)rɪŋ] технология полиграфического и упаковочного производства  
 technological machines and equipment [ˌtek.nəˈlɒdʒɪk(ə)l məˈʃiːn ənd ɪˈkwɪpmənt] технологические машины и оборудование  
 technology of industrial waste recovery [tekˈnɒlədʒɪ əv ɪnˈdʌstriəl weɪst rɪˈkʌv(ə)rɪ] технология утилизации промышленных отходов  
 graduate (n) [ˈɡrædʒueɪt] выпускник  
 integrated pulp and paper mill – целлюлозно-бумажный комбинат  
 industrial timber complex – промышленный лесокомбинат  
 research and design centre – научно-исследовательский проектный центр  
 contribute (v) [kənˈtrɪbjʊːt] способствовать  
 train (v) [treɪn] готовить  
 capable (a) [ˈkeɪpəb(ə)l] способный  
 operate (v) [ˈɒpəreɪt] управлять  
 up-to-date (a) [ˌʌptəˈdeɪt] современный  
 apply (v) [əˈplaɪ] применять  
 equipment (n) [ɪˈkwɪpmənt] оборудование

## Упражнения

### 1. Переведите на английский язык.

Высшая школа технологии и энергетики, инженер-технолог, инженер-механик, готовить, обработка древесины, технология упаковочного производства, технологические машины и оборудование, целлюлозно-бумажный комбинат, промышленный комбинат, управлять, научно-исследовательский и проектный центр, лесокомбинат, современный, сложный, оборудование.

## 2. Подберите английские эквиваленты следующим словосочетаниям.

- |  |  |
|--|--|
| 1) управляющий современными технологическими процессами  | a) the number of products manufactured from paper and paperboard |
| 2) технология химической обработки древесины             | b) technological machines and equipment                          |
| 3) технологические машины и оборудование                 | c) operating up-to-date technological processes                  |
| 4) способствовать развитию культуры и цивилизации        | d) technology of chemical wood processing                        |
| 5) готовить квалифицированных специалистов               | e) to contribute to the development of culture and civilization  |
| 6) эффективно использовать современное оборудование      | f) to use up-to-date equipment efficiently                       |
| 7) количество изделий, произведенных из бумаги и картона | g) to train qualified specialists                                |

## 3. Заполните пропуски необходимыми предлогами и союзами.

- 1) I study ... the Higher School ... Technology and Power Engineering ... Saint Petersburg State University .... Industrial Technologies and Design.
- 2) The graduates ... our Institute work ... technology engineers and mechanical engineers ... numerous integrated pulp and paper mills. Many ... them work ... research or design centres.
- 3) It's difficult to imagine modern life ... pulp and paper.
- 4) Our engineers are highly qualified ... applying all up-to-date kinds ... equipment.
- 5) Paper greatly contributes greatly .... the development of culture.

**4. Заполните пропуски нужными вопросительными словами: where what. Ответьте на вопросы.**

- 1) ... do you study?
- 2) ... specialists does your Institute train?
- 3) ... do graduates of your Institute work?
- 4) ... is the role of pulp and paper industry in the national economy?
- 5) ... qualifications does your Institute give to its graduates?

**5. Перечислите по-английски специализации Вашего института.**

**Перечислите, где работают выпускники Вашего института.**

**Охарактеризуйте роль целлюлозно-бумажной промышленности в развитии национальной экономики.**

**Опишите задачи инженеров-выпускников Вашего института.**

**6. Переведите на английский язык.**

Целлюлозно-бумажная промышленность – один из важнейших видов промышленности в любой экономике. Количество изделий, производимых из бумаги, огромно. Наш институт готовит высококвалифицированных инженеров-технологов, которые управляют сложнейшими современными технологическими процессами и способны эффективно использовать разные виды современных машин и оборудования. Выпускники нашего института работают на разных целлюлозно-бумажных комбинатах, промышленных лесных комплексах, в исследовательских и проектных центрах.

**7. Перескажите текст из упражнения 6 по-английски.**

## 8. Переведите текст письменно.

The man has always had a wish to express his thoughts in written form and pictures. But he has not always had a necessary material on which to do this. The primitive man drew pictures on the wall of the cave. The ancient Babylonians wrote messages on heavy clay tablets and carried them from place to place. The Egyptians wrote on strips of native plant called papyrus. The Persians split the skins of animals, soaked them, dried them and made parchment. In China, in 105 AD a young scholar, Ts'ai Lun, added something new in the paper making. At this time the Chinese used silk and bamboo as writing materials. Ts'ai Lun transformed the inner bark of the mulberry tree into pulp and added water. The mixture dried in the form of a flat sheet on which messages could be written. It was the first real paper.

### Словарный минимум к тексту

wish (n) [wɪʃ] желание

draw – drew – drawn (v) [draʊ] рисовать

cave (n) [keɪv] пещера

heavy (a) [ˈheɪvi] тяжелый

clay (n) [kleɪ] глина

strip (n) [stri:p] полоска

plant (n) [plɑ:nt] растение

split (v) [splɪt] разрывать

skin (n) [skɪn] шкура

soak (v) [səʊk] вымачивать

parchment (n) [ˈpɑ:t[mə]nt] пергамент

add (v) [æd] добавлять

inner (a) [ˈɪnə] внутренний

bark (n) [bɑ:k] кора

mulberry tree [ˈmʌlb(ə)rɪˈtri:] тутовое дерево

pulp (n) [pʌlp] масса

fiber (n) ['faɪbə] ВОЛОКНО

sheet (n) [ʃi:t] ЛИСТ

**9. Спросите друг друга.**

- 1) How the primitive man expressed his thoughts.
- 2) How the Babylonians wrote their messages.
- 3) How the Egyptians wrote their messages.
- 4) How the Persians wrote their messages.
- 5) What the Chinese invention was.
- 6) What the first real paper represented.

**10. Перескажите текст из упражнения 8 по-английски.**

**11. Прочитайте, переведите и воспроизведите диалог по-английски.**

- A. Where did the art of papermaking appear?
- B. It appeared in China in 105 A.D. and was invented by a scholar Ts'ai Lun.
- A. How was the first paper manufactured?
- B. Ts'ai Lun transformed the inner bark of the mulberry tree into pulp, added water and dried the mixture in the form of a flat fiber sheet.
- A. When did the European people learn to make paper?
- B. Only in the XV century.
- A. Did they change the Chinese technology of papermaking?
- B. Not very much. They increases and varied the sorts of fibers and complicated the process of their treatment.
- A. So, it was a hand-made paper?
- B. Yes, but only till 1799, when the first papermaking machine was invented by a Frenchman Nicolas Robert.

## Словарный минимум у диалогу

increase (v) [ɪŋk'ri:z] увеличивать

vary (v) ['ve(ə)rɪ] разнообразить

complicate (v) ['kɒmplɪkeɪt] усложнить

fiber (n) ['faɪbə] волокно

### The Institute of Technology

(for technology engineers of industrial waste recovery)

I study at the Higher School of Technology and Power Engineering of Saint Petersburg State University of Industrial Technologies and Design. I am a student of its integral part – the Institute of Technology. I'm a future technology engineer of industrial waste recovery.

Our Institute trains engineers of different specializations:

- technology of chemical wood processing;
- technology and design of packaging manufacturing;
- technology of industrial waste recovery;
- technological machines and equipment.

Human progress has led to intensive exploitation of nuclear and solar energy, the World Ocean and Outer space. Very often economic activity of man has negative effects on the environment and consequently on the existence of man.

The Institute of Technology trains highly qualified specialists who contribute to solving the problem of environmental protection. They use different methods and technologies of waste-treatment, waste minimization at pulp and paper mills, complex treatment and utilization of waste products, environmental pollution prevention, etc.

I think that my future work is not only interesting, but absolutely necessary for the economy of our country.

## Словарный минимум к тексту

integral (a) [ˈɪntɪgrəl] неотъемлемый

technology of wood processing [tekˈnɒlədʒi əv wʊdˈprɒsɛsɪŋ] технология обработки древесины

technological design of packaging manufacturing [ˌteknəˈlɒdʒɪk(ə)ldɪˈzaɪn əv ˈpækɪdʒɪŋ, mænɪʃvˈfæktʃ(ə)ɪŋ] технология полиграфического и упаковочного производства

technological machines and equipment [ˌteknəˈlɒdʒɪk(ə)l məˈʃiːnzænd ɪˈkwɪpmənt] технологические машины и оборудование

technology of industrial waste recovery [tekˈnɒlədʒi əv ɪnˈdʌstriəl weɪst riˈkʌv(ə)ɪŋ] технология утилизации промышленных отходов

lead – led – led (v) [liːd] вести

Outer space [ˌaʊtəˈspeɪs] космическое пространство

environment (n) [ɪnˈvaɪ(ə)ntsmənt] окружающая среда

existence (n) [ɪgˈzɪst(ə)ns] существование

train (v) [treɪn] готовить

contribute (v) [kənˈtrɪbjʊːt] способствовать

treatment (n) [ˈtriːtmənt] обработка

waste (n) [weɪst] отходы

pulp and paper mill [pʌlp ændˈpeɪpəˈmɪl] целлюлозно-бумажный комбинат

utilization (n) [ˌjuːtɪlaɪˈzeɪʃ(ə)n] утилизация

pollution (n) [pəˈluːʃ(ə)n] загрязнение

prevention (n) [prɪˈvenʃ(ə)n] предупреждение, предотвращение

solve (v) [sɒlv] решать

## Упражнения

### 1. Переведите на английский язык.

Технология обработки древесины, технология полиграфического и упаковочного производства, технология утилизации промышленных отходов,

окружающая среда, космическое пространство, обработка, отходы, загрязнение, предотвращение.

**2. Подберите английские эквиваленты следующих русских словосочетаний.**

- |  |   |
|--|---|
| 1) утилизация промышленных отходов             | a) the environment and the existence of men |
| 2) мировой океан и космическое пространство    | b) wastewater treatment                     |
| 3) окружающая среда и существование человека   | c) environmental pollution prevention       |
| 4) защита окружающей среды                     | d) World Ocean and Outer Space              |
| 5) обработка отработанных отходов              | e) utilization of industrial wastes         |
| 6) предотвращение загрязнения окружающей среды | f) industrial waste recovery                |
| 7) использование отработанных отходов          | g) environmental protection                 |

**3. Заполните пропуски необходимыми предлогами.**

- 1) I study ... the Higher School ... Technology and Power Engineering ... Saint Petersburg State University .... Industrial Technologies and Design.
- 2) My future specialization is technology ... industrial waste recovery.
- 3) Human progress has led ... the intensive exploitation ... nuclear and solar energy.
- 4) Very often economic activity ... man has negative effects ... the environment and consequently ... the existence ... a man.
- 5) Our specialists try ... solve the problem ... environmental protection.



**4. Заполните пропуски нужными вопросительными словами.**

**Ответьте на вопросы.**

- 1) ... do you study?
- 2) ... specialists does your Institute train?
- 3) ... does economic activity of men lead to?
- 4) ... problems do the specialists of your Institute try to solve?
- 5) ... do they solve these problems?

**5. Перечислите на английском специализации Вашего института.**

**Перечислите отрицательные последствия экономического развития общества.**

**Опишите задачи инженера-технолога по утилизации промышленных отходов.**

**6. Переведите текст на английский язык.**

Часто экономическая деятельность людей приводит к отрицательному воздействию на окружающую среду и существование человека. Специалисты нашего института способствуют решению проблемы защиты окружающей среды. Их задача – использовать различные технологии обработки отходов, минимизировать отходы целлюлозно-бумажной промышленности, использовать сложную обработку и утилизацию продуктов отходов. Таким образом они смогут предупредить загрязнение окружающей среды.

**7. Перескажите текст из упражнения 6 по-английски, пользуясь Вашим переводом.**

**8. Переведите текст письменно.**

Recently more and more attention has been focused on the problem of protection of the environment. Over the past years the quality of many people's lives was deteriorated in some respects because of the technological progress.

People living near airports are constantly attacked by the noise of jet aircrafts taking off and landing. The motor car has been responsible for many changes in the environment. On the one hand, it has brought mobility to millions of people, but on the other hand, it has led to the construction of more noisy and dangerous roads and has polluted the atmosphere with exhaust fumes.

The countryside has been affected by the use of insecticides. The killing of insects has resulted in a loss of balance in the ecology. Insects, although a nuisance for farmers, provide food for birds. Fruit and vegetables sprayed with chemicals may have some poisonous effects upon the people who eat them.

Certain countermeasures against the destruction of the environment were introduced. These are the smokeless zones in large towns (the dangerous effects of “smog”, mixture of fog and smokes). Rivers which are fouled up with industrial chemical waste begin to be cleaned and the fish which could not live there can be caught again.

### Словарный минимум к тексту

- protect (v) [prə'tekt] защищать  
deteriorate (v) [di'tiəriəreɪt] ухудшать, разрушать  
jet aircraft (n) [dʒet'eəkɹɑ:ft] реактивный самолет  
take off (v) ['teɪk'ɒf] взлетать  
land (v) [lænd] приземляться  
responsible (a) [rɪ'spɒnsəb(ə)l] ответственный (за)  
dangerous (a) ['deɪndʒərəs] опасный  
exhaust fumes (n, pl) [ɪg'zɔ:st'fju:mz] выхлопные газы  
insecticides (n, pl) [ɪn'sektɪsaɪdɪz] инсектициды  
insect (n) ['ɪnsɛkt] насекомое  
loss (n) [lɒs] потеря  
nuisance (n) ['nju:s(ə)ns] вред, помеха  
provide (v) [prə'vaɪd] обеспечивать  
spray (v) [sprɛɪ] обрызгивать

poisonous (a) [ˈpɔɪz(ə)nəs] отравляющий  
countermeasures (n, pl) [ˈkaʊntəˌmeʒəz] контрмеры  
destruction (n) [dɪsˈtrʌkʃ(ə)n] разрушение  
fog (n) [fɒɡ] туман  
foul (v) [ˈfaʊl] заполнять  
clean (v) [kli:n] очищать  
catch – caught – caught (v) [ˌkætʃ] ловить

### **9. Спросите друг друга.**

- 1) Why people living near the airport suffer.
- 2) What the cars influence on atmosphere is.
- 3) How the countryside is affected by the insecticides.
- 4) What the role of chemicals used as fertilizers is.
- 5) How people struggle against the pollution of the town.

### **10. Перескажите текст из упражнения 8.**

### **11. Прочитайте и переведите диалог. Воспроизведите его по-английски.**

- A. Do you know what the structure of our atmosphere is?
- B. First of all, it's just air people, animals and plants breath.
- A. Not only. It is a gaseous substance which protects the Earth from the changes of temperature, harmful solar and cosmic radiation. But I'm asking you about its basic strata.
- B. So, it seems to me, the first one is the troposphere, about 17 kilometers high, which contains almost all the water vapour. And the second one is...
- A. It is the stratosphere, which is about 40 kilometers high.
- B. Is it this layer which contains the greatest concentration of ozone?

- A. Yes, ozone absorbs the ultraviolet radiation and protects life from its harmful effect. And the third one?
- B. The layer above the stratosphere must be the ionosphere.
- A. You are right. This layer protects us from cosmic radiation and influences the reflection and absorption of radio waves. And the last one?
- B. The last layer located above the ionosphere is the exosphere.
- A. Quite right. And it contains gas molecules dispersed into the outer space.

### Словарный минимум к диалогу

breath (v) [br i:ð] дышать

strata (n) ['strɑ:tə] слой

layer (n) ['leɪə] слой

contain (v) [kən'teɪn] содержать

reflection (n) [rɪ'flekʃ(ə)n] отражение

disperse (v) [dɪs'pɜ:s] рассеивать(ся)

### The Institute of Power Engineering and Automation (for heat power engineers)

I study at the Higher School of Technology and Power engineering of Saint Petersburg State University of Industrial Technologies and Design. I am a second-year student of its integral part – the Institute of Power Engineering and Automation. My future specialization is heat power engineering.

Our industry and economy are greatly connected with the power engineering. It is impossible to imagine modern life without heat and electricity. Thermal power stations and municipal and industrial boiler houses play an important role in energy system of our country. At present great attention is paid to combined generation of heat and electricity at heat and power plants and to centralized heat supply. A qualified specialist should assure that the technological processes and operation of modern equipment along with the cost of heat energy and electricity to be produced suit market requirements. From this point of view the profession of a

heat-power engineer is extremely necessary and important and a specialist in this field should be a real professional.

Our Institute trains qualified engineers capable of operating the most complicated up-to-date technological processes and highly competent in applying modern kinds of equipment and using it in the most efficient manner. I think that my future work is not easy, but absolutely necessary for our national economy.

### Словарный минимум к тексту

power engineering (n) [ˈpaʊə,ɛndʒɪˈni(ə)rɪŋ] энергетика

integral (a) [ˈɪntɪgrəl] неотъемлемый

connect (v) [kəˈnekt] связывать

imagine (v) [ɪˈmædʒɪn] представлять

thermal power station [ˈθɜ:m(ə)l ˈpaʊə ˈsteɪʃ(ə)n] теплоэлектростанция

boiler house (n) [ˈbɔɪlə,haʊs] котельная

play a role – играть роль

pay attention – обращать внимание

combined generation – совместное производство

heat power plant – теплоэлектростанция

assure (v) [əˈʃʊə] обеспечивать

supply (n) [səˈplaɪ] снабжение

along with (prep) [əˈlɒŋ wɪð] наряду с

equipment (n) [ɪˈkwɪpmənt] оборудование

cost (n) [kɒst] стоимость

suit (v) [s(j)u:t] соответствовать

requirement (n) [rɪˈkwaɪəmənt] требование

from this point of view – с этой точки зрения

field (n) [faɪl] область

train (v) [treɪn] готовить

capable (a) [ˈkeɪpəb(ə)l] способный

operate (v) [ˈɒpəreɪt] управлять

up-to-date (a) [ˌʌptəˈdeɪt] современный

apply (v) [əˈplɑɪ] применять

manner (n) [ˈmænə] способ

## Упражнения

### 1. Переведите на английский язык.

Институт энергетики и автоматизации, теплоэнергетика, теплоэлектростанция, котельная, придавать большое значение, производство тепла и электричества, обеспечивать, соответствовать требованиям рынка, готовить квалифицированных инженеров, применять современные виды оборудования.

### 2. Подберите английские эквиваленты следующих русских выражений.

- |  |  |
|--|--|
| 1) совместное производство тепла и электричества | a) the cost of heat energy and electricity     |
| 2) с этой точки зрения                           | b) combined generation of heat and electricity |
| 3) применять современные виды оборудования       | c) to operate up-to-date equipment             |
| 4) инженер-теплоэнергетик                        | d) centralized heat supply                     |
| 5) централизованное теплоснабжение               | e) from this point of view                     |
| 6) стоимость тепла и электричества               | f) to apply modern kinds of equipment          |
| 7) управлять современным оборудованием           | g) heat power engineer                         |

### 3. Заполните пропуски нужными предлогами.

- 1) The economy is greatly connected ... the power engineering.
- 2) It is impossible to imagine modern life .... heat and electricity.
- 3) Great attention is paid ... combined generating ... heat and electricity.

- 4) ... this point ... view the profession ... a heat power engineer is very important.
- 5) Our engineers are capable ... applying modern kinds ... equipment.
- 6) The technological process ... the cost ... heat energy must suit market requirements.
- 7) My future profession is necessary ... our national economy.

**4. Заполните пропуски соответствующими вопросительными словами.**

**Ответьте на вопросы.**

- 1) ... do you study?
- 2) ... is our economy connected with?
- 3) ... enterprises (предприятия) play an important role in the energy system?
- 4) ... is great attention paid to?
- 5) ... must assure that the technological process along with the cost of heat energy and electricity suit market requirements?
- 6) ... kind of engineers does your Institute train?

**5. Перечислите предприятия, играющую важную роль в энергетической системе страны.**

**Назовите главные задачи современной энергосистемы нашей страны.**

**Укажите основные задачи квалифицированных инженеров, выпускаемых Вашим институтом.**

**6. Переведите текст на английский язык.**

Проблема использования возобновляемых (renewable) источников энергии – солнечной, энергии приливов и отливов (tidal) и геотермальной энергии – имеет большое значение. Практическое использование солнечной энергии может быть полезным во многих областях. Специалисты изобрели водобогревающие установки (installations) для сезонных и круглогодичных работ. Они уже построили дома, снабжаемые солнечной энергией (solar-powered), общественные здания с горячим водоснабжением (hot water supply)

и кондиционированием (air-conditioning). Отапливаемые солнцем теплицы (green-houses), солнечные установки для сушки (drying) овощей дают хорошие результаты.

**7. Спросите друг друга по-английски. Ответьте на вопросы.**

- 1) Какие виды возобновляемой энергии Вы знаете?
- 2) Где используется солнечная энергия?

**8. Прочитайте и переведите текст.**

In 1763 a self-taught man, the son of a Russian soldier Ivan Polzunov (1728–1766) worked out the project of the first universal steam engine (двигатель). The construction of the engine involved great difficulties due to lack (недостаток) of necessary instruments, qualified assistants and in general lack of help and support. Polzunov had to do everything with his own hands. Polzunov's engine had been working from August to November 10, 1766, when it was stopped and put out of operation because of a leak in the boilers. But Polzunov did not live to see the results of his work. He died in poverty on May 27, 1766.

**9. Спросите друг друга. Ответьте на вопросы.**

- 1) When and where Ivan Polzunov lived.
- 2) What project he worked out.
- 3) Why the process of construction of his engine was so difficult.
- 4) How long Polzunov's engine had been working.
- 5) What the reason of its stopping was.
- 6) If Polzunov could see the results of his work.

**10. Перескажите текст из упражнения 9 по-английски.**

**11. Прочитайте и переведите диалог. Воспроизведите его по-английски.**

- A. What kinds of circuits do you know?
- B. There are series circuits and parallel circuits.



- A. What elements do these circuits include?
- B. They include a voltage source and two or more resistors.
- A. How are these elements connected?
- B. In the series circuits the resistors are connected in series while in the parallel circuits they are connected in parallel.
- A. What is the value of current in all the elements of the series circuit?
- B. All the elements in the series circuit have the same value of current.
- A. And in the parallel circuit?
- B. In the parallel circuit the value of current in the resistors is smaller. It differs from the value of current coming from the source of voltage.

### **Словарный минимум у диалогу**

series circuit [ˈsi(ə)ri:z ˈsɜ:kɪt] цепь с последовательным соединением

include (v) [ɪnˈklu:d] включать

voltage source (n) [ˈvɒltɪdʒˈsɔ:s] источник напряжения

connect (v) [kəˈnekt] соединять

value of current (n) [ˈvælju: əvˈkʌrənt] величина тока

differ (v) [ˈdɪfə] отличаться

### The Institute of Power Engineering and Automation (for automation engineers)

I study at the Higher School of Technology and Power Engineering of Saint Petersburg State University of Industrial Technologies and Design. I am a second-year student of the Institute of Power Engineering and Automation.

Our Institute trains qualified engineers capable of operating the most complicated up-to-date technological processes who are competent in applying modern kinds of equipment. I'm a future automation engineer.

Our Institute trains automation engineers of three special fields:

- 1) electrical drive and automation of industrial installations;

- 2) automation of chemical-technological processes;
- 3) automation of heat power processes.

Automation is an essential part of scientific and technical progress. At present all types of computers are widely applied in all branches of our industry. Any research or design institute, any plant or mill is provided with automatic equipment. Automation helps people to carry out scientific investigation, plan our future economy, treat new materials, control different production processes and produce different goods. Automation greatly contributes to economic growth and productivity increase.

I think that my future work is not only interesting, but absolutely necessary for our national economy.

### Словарный минимум к тексту

automated control system	[ˌɔ:tə'meɪtɪd kən'trɒl 'sɪstɪm]	автоматизированная система управления
complicated (a)	['kɒmplɪkeɪtɪd]	сложный
up-to-date (a)	[ˌʌptə'deɪt]	современный
apply (v)	[ə'plaɪ]	применять
equipment (n)	[ɪ'kwɪpmənt]	оборудование
field (n)	[fi:ld]	область
electric drive (n)	[ɪˌlektɪk 'draɪv]	электропривод
installation (n)	[ˌɪnstə'leɪʃ(ə)n]	установка
heat power (n)	[hi:t'paʊə]	тепловая энергия
essential (a)	[ɪ'senʃ(ə)l]	основной
branch (n)	[brɑ:ntʃ]	отрасль
design (n)	[dɪ'zaɪn]	проект
provide (v)	[prə'vaɪd]	обеспечивать
carry out (v)	['kæri'aʊt]	осуществлять
treat (v)	[tri:t]	обрабатывать

goods (n, pl) [gʊdz] товары

contribute (v) [kən'trɪbjʊ:t] способствовать

increase (n) ['ɪŋkri:s] рост

## Упражнения

### 1. Переведите на английский язык.

Высшая школа технологии и энергетики, институт энергетики и автоматизации, готовить, инженер-теплоэнергетик, инженер-автоматчик, автоматизированные системы управления промышленными установками, автоматизация теплоэнергетических процессов, применять компьютеры, отрасли экономики, обрабатывать, производственный процесс, способствовать, рост производства.

### 2. Подберите английские эквиваленты следующих русских словосочетаний.

- |   |  |
|---|--|
| 1) специалист, управляющий современными технологическими процессами | a) essential part of technical progress<br>b) to contribute to the economic increase |
| 2) завод снабжен автоматическим оборудованием                       | c) the mill is provided with automatic equipment                                     |
| 3) планировать будущее развитие экономики                           | d) the specialist operating up-to-date technological processes                       |
| 4) проводить научные исследования                                   | e) to plan the prospects of economy  |
| 5) контролировать производственные процессы                         | f) to control production process<br>g) to carry out scientific investigations        |
| 6) способствовать росту экономики                                   |  |
| 7) важнейшая часть технического прогресса                           |  |

### **3. Заполните пропуски необходимыми предложениями.**

- 1) The Institute ... Power Engineering and Automation.
- 2) Automation is an essential part ... scientific and technical progress.
- 3) All types ... computers are applied ... all branches ... our industry.
- 4) Automation greatly contributes ... economic and productivity increase.
- 5) My work is absolutely necessary ... our national economy.
- 6) The mills are provided ... automatic equipment.

### **4. Заполните пропуски соответствующими вопросительными словами.**

**Ответьте на вопросы.**

- 1) ... do you study?
- 2) ... Institute do you study at?
- 3) ... specialists does your institute train?
- 4) ... is the role of automation in the economic increase of every country?
- 5) ... are any research or design institutes provided with?

### **5. Перечислите специалистов, которых готовит Ваш институт.**

**Перечислите специальности инженеров-автоматчиков, которых готовит Ваш институт.**

**Перечислите отрасли, в которых работают инженеры-автоматчики.**

### **6. Переведите текст на английский язык.**

За последние 30 лет использование Интернета сильно выросло. В 1983 г. только 200 компьютеров были подключены к Интернету. Сейчас их миллионы и это число продолжает расти. Пользователи могут приобретать книги, билеты, делать разного рода покупки и получать разную информацию по Интернету. Сеть очень важна для людей и организаций, подключенных к ней. Интернет позволяет Вам делать множество дел одновременно (simultaneously). Интернет может заменить почтовые услуги и телевидение.

**7. Спросите друг друга по-английски. Ответьте на эти вопросы.**

- 1) Какова была сеть Интернета в конце XX века.
- 2) Что можно делать сейчас с помощью Интернета.

**8. Переведите текст письменно. Закройте книгу и воспроизведите текст по-английски, пользуясь Вашим переводом.**

Everyone heard of Bill Gates, the icon of American business and the richest man in the world. Microsoft, the business he started with a friend in 1975, has become the world's largest computer software company. Bill Gates was born in 1955 in Seattle, USA. After finishing school he entered Harvard, American most famous university. Most of the time he worked on the computers in the university laboratory. With his friend Paul Allen he wrote an operating program for one of the world's best microcomputers, Microsoft, which very soon became a big success.

**9. Прочитайте и переведите текст.**

50 years ago people didn't even hear of computers, but today we cannot imagine our life without them. Computer technology is the fastest growing industry in the world. The first computer was the size of a microbus and weighted a ton. Today its job can be done by a chip the size of a pin head (булавочная головка). And the revolution is still going on. Very soon we'll have computers that we will wear (носить) on our wrist (запястье) or even in our glasses or earrings (серьжки). The next generation of computers will be able to talk for themselves. They will contain neural networks (нейронные сети). Of course, they will still be simpler than human brain (мозг), but it will be the greatest step forward. Such computers will help to diagnose illness, find minerals, identify criminals and control space travel.

**10. Спросите друг друга.**

- 1) What technology is the fastest growing industry at present.
- 2) What size the first computer was.

- 3) What size the modern computer is.
- 4) Where we could wear computers in future.
- 5) How the future computer can help people.

**11. Перескажите текст из упражнения 9 по-английски.**

**12. Прочитайте и переведите диалог. Воспроизведите его по-английски.**

- A. Today the computer technology is developing rapidly. Computers are a source of information, education and entertainment. But today's world of computers may be also dangerous. This is because of people who use the computers for illegal purposes. What do you know about hackers?
- B. Hackers are users who play with computer data in all parts of cyberspace. Much of all they do is not dangerous, but they also can breach the law, for example they break websites, take control of computers or create viruses.
- A. Yes, they use a "Trojan Horse", a program which looks safe, but contains something destructive.
- B. And although they can get serious punishment if they are caught, hackers think that what they do is a game. They often meet at festivals, take part in discussions, share their experience and generally have a good time.
- A. Unfortunately their activity is increasing. Hackers are getting into computer systems, stealing or destroying information.
- B. Imagine hackers getting through the security military website.
- A. I think, they are real high-tech criminals.

**Словарный минимум к диалогу**

purpose (n) ['pʊ:zə] цель

breach the law (v) [brɪ:tʃ θə'lo:] нарушать закон

safe (a) [seɪf] безопасный

contain (v) [kən'teɪn] содержать

punishment (n) ['pʌnɪʃmənt] наказание

share (v) [ʃeə] ОБМЕНИВАТЬСЯ

steal (v) [sti:l] КРАСТЬ

### The Institute of Innovative Management Technologies (for engineers-economists)

I study at the Higher School of Technology and Power Engineering of Saint Petersburg State University of Industrial Technologies and Design. I am a second-year student of the Institute of Innovative Management Technologies.

We have lectures on economics which studies the economy as a whole and tries to find laws by building models. In particular, it studies the overall values of output, unemployment, inflation and some other problems. We also study microeconomics. This science deals with individual producers, consumers or markets.

Production management is very important in every industry. All kinds of problems connected to the management of paper manufacturing are supervised from the economic point of view. It is the task of engineer-economists to calculate the expenditure for the raw material, equipment, manufacturing process, all the profit, taxes, losses, wages etc. The department of economic management is the most important at every mill.

Highly developed economy requires highly qualified specialists in economics in different fields of production and civil life as well.

The students of our university are ready to use their knowledge of computer accountancy and many different skills acquired during their study.

I like my future profession which is not only interesting, but very useful too.

### **Словарный минимум к тексту**

innovative (a) [ˈɪnəveɪtɪv] ИННОВАЦИОННЫЙ

as a whole [ˌæz əˈhəʊl] В ЦЕЛОМ

try (v) [traɪ] стараться  
find (v) [faɪnd] находить  
law (n) [lɔ:] закон  
overall value (n) [ˌəʊvəˈrɔ:l ˈvælju:] общая стоимость  
output (n) [ˈaʊtpʊt] выпускаемая продукция  
unemployment (n) [ˌʌnɪmˈplɔɪmənt] безработица  
deal with (v) иметь дело с  
production management (n) [prəˈdʌkʃ(ə)nˈmænɪdʒmənt] управление производством  
connect (v) [kəˈnekt] связывать  
manufacture (n) [ˌmænɪʃʊˈfæktʃə] производство  
supervise (v) [ˈs(j)u:pəvaɪz] контролировать  
point of view (n) [ˌpɔɪntəvˈvju:] точка зрения  
task (n) [tɑːsk] задача  
expenditures (n, pl) [ɪkˈspendɪtʃəz] расходы  
raw material (n) [rɔːməˈtɪ(ə)rɪəl] сырье  
foresee (v) [fɔːˈsi:] предвидеть  
loss (n) [lɒs] убыток  
require (v) [rɪˈkwaɪə] требовать  
field (n) [fi:ld] область  
accounting (n) [əˈkaʊntɪŋ] учет  
skill (n) [skɪl] умение

## Упражнения

### 1. Переведите на английский язык.

Институт инновационных управленческих технологий, строить модели, общая стоимость, выпускаемая продукция, иметь дело с, контролировать, расходы, предвидеть, требовать, производство, компьютерный учет, умения.



## **2. Заполните пропуски необходимыми предложениями.**

- 1) I am a student ... the Institute ... Innovative Management Technologies.
- 2) We have lectures ... macroeconomics.
- 3) Microeconomics deals ... individual producers, consumers or markets.
- 4) The problems connected ... the management ... manufacturing are supervised ... the economic point ... view.
- 5) Engineer-economists calculate the expenditure ... the raw material, equipment, manufacturing process.
- 6) Macroeconomics studies the overall values ... output.
- 7) Highly developed economy requires highly qualified specialists ... economics ... different fields of production.

## **3. Подберите английские эквиваленты следующих русских словосочетаний.**

- |  |                                    |
|--|------------------------------------|
| 1) общая стоимость выпускаемой продукции | a) fields of production            |
| 2) с экономической точки зрения          | b) highly-qualified specialists    |
| 3) в частности                           | c) overall value of output         |
| 4) производственный процесс              | d) from the economic point of view |
| 5) высокоразвитая экономика              | e) manufacturing process           |
| 6) высококвалифицированные специалисты   | f) computer accountancy            |
| 7) компьютерный учет                     | g) in particular                   |
| 8) области производства                  | h) highly developed economy        |

## **4. Замените пропуски соответствующими вопросительными словами.**

### **Ответьте на вопросы.**

- 1) ... do you study?
- 2) ... is the main subject at your Institute?
- 3) ... does macroeconomics study?

- 4) ... does microeconomics study?
- 5) ... do the engineers-economists have to calculate and foresee?
- 6) ... .... point of view are all the problems of the management of manufacture supervised?
- 7) ... is the production management so important in every industry?

**5. Перечислите, что изучает микроэкономика.**

**Перечислите, что изучает макроэкономика.**

**Перечислите задачи инженеров-экономистов на промышленном предприятии.**

**6. Перескажите текст.**

**7. Переведите текст письменно. Закройте книгу и воспроизведите текст устно по-английски, пользуясь Вашим русским переводом.**

A hundred years ago the traditional type of shops were small shops owned and run by one or two men and their families, where they were selling cheese, bacon, flour. The small corner shops still exist today, but it is no longer the most important type of shop. Shops have become bigger. In the high street we now find self-service supermarkets and chain stores. Out of town there are hypermarkets with large car-parks. They sell everything and their prices are often lower because they do not have to pay the high rents of the high street shops.

**Словарный минимум к тексту**

shop (n) [ʃɒp] магазин

own (v) [əʊn] владеть

run a shop (v) торговать в магазине

corner shop (n) магазинчик по соседству (на углу)

high street (n) [ˈhaɪstri:t] большая улица

chain store (n) [ˈtʃeɪn.stɔː] сетевой магазин

rent (n) [rent] арендная плата

## 8. Прочитайте и переведите текст.

Adam Smith

Adam Smith was a great scientist who made extraordinary contribution in economics.

He was born in 1723 in Kirkcaldy, a small fishing town near Edinburg, Scotland.

At the age of 28 Adam Smith became a Professor of Logics at the University of Glasgow. It was his first academic appointment. Some time later he became a tutor to a wealthy Scottish duke. Then he received a grant of £300 a year. It was a very big sum, 10 times the average income at that time.

With the financial security of his grant, Smith devoted 10 years to writing his work which founded economic science. Its full title was “An Inquiry into the Nature and Causes of the Wealth of Nations”. It was published with great success in 1776.

Adam Smith made economics a science. This Scottish economist is often regarded as the founder of political economy too.

### Словарный минимум к тексту

become (v) [bi'kʌm] становиться

appointment (n) [ə'pɔɪntmənt] должность, назначение

wealth (n) [welθ] богатство

duke (n) [dju:k] граф

average (a) ['æv(ə)rɪdʒ] средний

income (n) ['ɪŋkʌm] доход

support (n) [sə'pɔ:t] поддержка

devote (v) [dɪ'veʊt] посвящать

inquiry (n) [ɪn'kwɪrɪ(ə)rɪ] исследование

regard (v) [rɪ'gɑ:d] считать

### **9. Спросите друг друга.**

- 1) When and where Adam Smith was born.
- 2) What his first appointment was.
- 3) How big the grant he received some time later was.
- 4) What work Adam Smith did with the support of his grant.
- 5) What the role of Adam Smith in the history of economic is.

### **10. Перескажите текст из упражнения 8 по-английски.**

### **11. Прочитайте, переведите и воспроизведите диалог по-английски.**

A. What is a lease?

B. A lease is an agreement between the owner of an object and a person who wants to use it.

A. Is it arranged in a written form?

B. Of course, it confirms the leaseholder's permission to use the object for a fixed period of time.

A. So, the owner gives the leaseholder the permission to use a building, for example, and what does the leaseholder have to do in return?

B. In return, the leaseholder pays rent to the owner and is responsible for the building.

A. What does it mean "responsible for the building"?

B. It means that he arranges insurance, carries out the repairs if it is necessary.

A. So, for the owner leasing is a good way to earn a regular income from his property, isn't it?

B. Yes. The main risk is that the leaseholder may not be able to keep up his payment. Then they may have some unpleasant legal proceedings.

### **Словарный минимум к диалогу**

lease (n) [li:s] аренда

owner (n) ['əʊnə] собственник, владелец

leaseholder (n) ['li:s,həvldə] арендатор  
permission (n) [pə'mɪʃ(ə)n] разрешение  
responsible (a) [rɪ'spɒnsəb(ə)l] ответственный  
arrange (v) [ə'reɪndʒ] организовывать, устраивать  
unpleasant (n) [ʌn'plez(ə)nt] неопрятный  
legal proceedings ['li:g(ə)lprə'si:diŋz] судебные разбирательства

## **SAINT PETERSBURG**

Saint Petersburg, the second largest city in Russia and one of the most beautiful cities in the world, has played an important role in Russian history. It was founded by Peter the Great as the "Window on Europe" in 1703 and remained the capital of the Russian Empire for two centuries.

Saint Petersburg was the scene of two revolutions. After the revolution of 1917 it was renamed into Leningrad and became the capital of the new Republic.

During World War II the city was besieged and fiercely defended.

Saint Petersburg is situated on the Neva River. The city once spread across nearly 100 islands. Canals and natural channels make St. Petersburg a city of waterways and bridges that is why it is often called the Venice of the North.

The modern city is an important cultural and industrial centre as well as the nation's largest seaport. In 1991 St. Petersburg got its original name back.

Central St. Petersburg is divided into four parts by the Neva River: the Admiralty Side, Vasilyevsky Island, the Petrograd Side, and the Vyborg Side. The Admiralty Side is rich in museums, monuments, historical buildings and squares. From the Admiralty, the heart of Peter's city, an avenue known as Nevsky Prospect runs eastwards. There are a lot of palaces, churches, stores, cafes, and theatres there.

St. Petersburg is proud of its rich architecture that includes the cathedral of the Peter-Paul Fortress, the Summer Palace, the Winter Palace, the Kazan and St. Isaac's cathedrals, the Smolny Institute, the new Admiralty and the Senate. There

are many important educational and scientific research centres in St. Petersburg. Among these are: Saint Petersburg State University, the Russian Academy of Arts, Saint Petersburg Mining University and the Military Academy.

Saint Petersburg is a city of culture. There are a lot of theatres and concert halls there. The Mariinsky Theatre has long enjoyed an international reputation, and its resident company is frequently on tour abroad. Other important theatres are the Mali, Gorky, Pushkin, and Musical Comedy theatres. Famous museums include the State Russian Museum, which specializes in Russian painting, and the Hermitage with a rich collection of Western painting. There one can see masterpieces of outstanding artists such as Leonardo da Vinci, Raphael, Rembrandt, Velazquez and other unique works of art.

Citizens and tourists enjoy visiting the suburbs of St Petersburg: Petergof, Pushkin, Pavlovsk with their wonderful palaces, parks and fountains.

Saint Petersburg inspired many of our great poets, writers, painters, sculptors, composers and actors. Much of the life and work of Pushkin, Dostoevsky, Tchaikovsky, Repin and Kramskoi was connected with the city.

### **Словарный минимум к тексту**

found (v) [faʊnd] основать

remain (v) [rɪˈmeɪn] оставаться

capital (n) [ˈkæpɪtl] столица

scene (n) [si:n] место действия

rename (v) [ri:ˈneɪm] переименовать

besiege (v) [brˈsi:dʒ] осаждать

fiercely (adv) [ˈfɪəslɪ] (зд.) отчаянно, упорно

defend (v) [dɪˈfend] защищать

spread (v) [sprɛd] распространять(ся)

waterway (n) [ˈwɔ:təweɪ] водная артерия

seaport (n) [ˈsi:pɔ:t] морской порт, портовый город

original (a) [əˈrɪdʒɪn(ə)l] первоначальный

divide (v) [dɪˈvaɪd] разделять

rich in sth. (a) [ˈrɪtʃ ɪn] богатый чем-л.

square (n) [skweə] площадь

palace (n) [ˈpælɪs] дворец

store (n) [stɔ:] магазин

be proud of sth. (v) – гордиться чем-л.

enjoy a reputation – иметь репутацию

resident company (n) – компания-резидент

masterpiece (n) [ˈmɑ:stəpi:s] шедевр

outstanding (a) [aʊtˈstændɪŋ] выдающийся

artist (n) [ˈɑ:tɪst] художник

unique (a) [ju:ˈni:k] уникальный

citizen (n) [ˈsɪtɪz(ə)n] житель, горожанин

suburb [ˈsʌbɜ:b] (n) пригород

inspire (v) [ɪnˈspaɪə] вдохновлять

connect (v) [kəˈnekt] связывать

## Упражнения

### 1. Переведите следующие словосочетания на английский язык.

Второй по величине город, играть важную роль, место действия двух революций, осаждать, водная артерия, Северная Венеция, культурный и промышленный центр, богатая архитектура, научные и научно-педагогические исследовательские центры, концертный зал, знаменитый музей, шедевры выдающихся художников, уникальные произведения

искусства, посещать пригороды, прекрасные дворцы, парки и фонтаны, вдохновлять.

## **2. Заполните пропуски необходимыми предложениями.**

- 1) Saint Petersburg which is one .... the most beautiful cities ... the world, has played an important role ... Russian history.
- 2) It was founded ... Peter the Great ... 1703 and remained the capital ... the Russian Empire ... two centuries.
- 3) ... the revolution of 1917 it was renamed ... Leningrad and became the capital ... the new Republic.
- 4) Central Saint Petersburg is divided ... the Neva River ... four parts.
- 5) The Admiralty Side is rich ... museums, monuments, historical buildings and squares.
- 6) St. Petersburg is proud ... its rich architecture.
- 7) The State Russian Museum specializes ... Russian painting.
- 8) Much ... the life and work ... Pushkin, Dostoevsky, Tchaikovsky, Repin and Kramskoi was connected ... the city.

## **3. Спросите друг друга.**

1. When Saint Petersburg was founded.
2. Where Saint Petersburg is situated.
3. Why it is often called the Venice of the North.
4. What four parts there are in central Saint Petersburg.
5. What the Admiralty side is rich in.
6. What theatres there are in Saint Petersburg.
7. Where one can see masterpieces of modern artists.
8. The life of what famous people is connected with St. Petersburg.



#### **4. Прочитайте диалог и воспроизведите его по-английски.**

Dan: How much do you know about St. Petersburg? Have you ever been there?

Kate: I actually go there every summer to visit my cousins.

Dan: You must have been to the Hermitage, haven't you?

Kate: Yes, certainly I have. The Hermitage is one of the most outstanding museums in the world. It is considered one of the world's greatest museums of art.

Dan: What kind of collections does it have? What is it famous for?

Kate: It has some truly fabulous treasures that have been collected through many years. It basically has rich art collections of all ages. The Oriental art collection of the Museum is the richest in the world and it's my favorite.

Dan: Are there also collections representing art and culture of the peoples of the Near and Far East?

Kate: Yes, there are. I was truly impressed by the rare and splendid collections from China and India, also ancient Greece and Rome I saw there.

Dan: Can I see works by Raphael and Rembrandt there too? They are my favorite painters.

Kate: Oh yes, you can. Western European painting collection is widely represented in the Hermitage. It includes world famous works by Leonardo da Vinci, Raphael, Titian, Murillo, Rubens, Rembrandt and many other masters.

Dan: What about pictures representing the art of Italy, Spain, Holland and France?

Kate: You won't be disappointed with that collection either. The museum also exhibits the art of Belgium, Germany, Austria, Great Britain, Sweden, Finland, Denmark and some other Western European countries.

Dan: Can you tell me a little more about the Western - European section in the museum?

Kate: Well, it includes a very fine collection of European sculpture with monuments by such titans as Michelangelo, Rodin, Falconet and many other eminent sculptors.

Dan: Sounds very impressive. Is it true that the museum mostly exhibits paintings

and sculpture?

Kate: Not really. The museum actually has the world's most outstanding collections of applied art too: lace, furniture, tapestries, ivories, porcelain, metalwork, silver, jewelry - you name it!

Dan: The Hermitage is open to the public every day, isn't it?

Kate: Yes, it is. Its working hours are very convenient.

Dan: I'd love to visit it one day.

Kate: You absolutely should. I could be your guide if I am in St. Petersburg when you visit.

Dan: Thank you so much for the offer. I'll keep that in mind.

### Словарный минимум к диалогу

actually (adv) [ˈæktʃ(ʊ)əli] на самом деле

outstanding (a) [aʊtˈstændɪŋ] выдающийся

consider (v) [kənˈsɪdə] считать, рассматривать

fabulous (a) [ˈfæbjʊləs] прекрасный, превосходный

treasure (n) [ˈtreɪzə] сокровище

Oriental (a) – восточный

represent (v) [ˌreprɪˈzent] представлять

impress (v) [ˈɪmpres] впечатлять

splendid (a) [ˈsplendɪd] великолепный, восхитительный

painting (n) [ˈpeɪntɪŋ] картина, живопись

disappoint (v) [ˌdɪsəˈpɔɪnt] разочаровывать

exhibit (v) [ɪgˈzɪbɪt] выставлять

eminent (a) [ˈemɪnənt] знаменитый, выдающийся

impressive (a) [ɪmˈpresɪv] впечатляющий, выразительный

tapestry (n) [ˈtæpɪstri] гобелен

ivory (n) [ˈaɪv(ə)rɪ] слоновая кость

porcelain (n) [ˈpɔːslɪn] фарфор

jewelry (n) [ˈdʒuːəlrɪ] ювелирные украшения

convenient (a) [kənˈviːniənt] удобный

**5. Переведите текст письменно. Перескажите его, пользуясь Вашим переводом.**

Palace Square

Palace Square is the main square in Saint Petersburg. It is one of the world's most interesting architectural ensembles. The buildings here were erected by different architects at different times but all of them represent a complete architectural unit.

The oldest building here is the Winter Palace constructed by B. Rastrelli in 1754 - 1762 in Russian baroque style. The Palace building is nearly two kilometres long in perimeter and has over 1000 rooms. It is the former residence of Russian tsars. Now the palace is one of the buildings of the State Hermitage Museum.

In front of it one can see the so-called General staff in classical style by Carlo Rossi (1829). The semicircular building is the longest in Europe – about 600 metres. The crowning point of the composition is the victory chariot on top of the arch designed by the sculptors S. Pimenov and V. Demut-Malinovsky who for many years worked together with Rossi. This majestic building was erected as a monument to Russia's Victory in the Patriotic war of 1812 against Napoleon.

Another monument in honour of Russia's victory over Napoleon was the Triumphal Column erected in the centre of Palace Square in 1834 by A. Montferrand, called the Alexander Column. This is the highest granite monolith in the world. The column is 47,5 meters high and 3,66 metres in diameter. It is interesting to note that it is not fastened and stands entirely by its own weight which is about 600 tons. The column is crowned with figure of an angel carrying a

cross (sculptor B. Orlovsky). The pedestal is ornamented with haut relief whose theme is the glory of Russian arms.

### Словарный минимум к тексту

erect (v) [i'rekt] воздвигать

represent (v) [ˌrɛprɪ'zɛnt] представлять

complete (a) [kəm'pli:t] завершённый

unit (n) ['ju:nɪt] (зд.) целое

residence (n) ['rezɪd(ə)ns] резиденция

palace (n) ['pælɪs] дворец

semicircular (a) [semɪ'sɜ:kjʊlə] полукруглый

chariot (n) ['tʃæriət] колесница

fasten (v) [ˈfɑ:s(ə)n] закреплять

entirely (adv) [ɪn'taɪəli] полностью

weight (n) [weɪt] вес

crown (v) [kraʊn] венчать

ornament (v) [ˈɔ:nəment] украшать

haut relief (n) – горельеф

arms (n, pl.) [ɑ:mz] оружие

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## **АНГЛИЙСКИЙ ЯЗЫК**

### **УЧЕБНО-МЕТОДИЧЕСКОЕ ПОСОБИЕ ПО РАЗВИТИЮ ИНТЕРАКТИВНЫХ НАВЫКОВ УСТНОЙ РЕЧИ**

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