



ДОНСКОЙ ГОСУДАРСТВЕННЫЙ ТЕХНИЧЕСКИЙ УНИВЕРСИТЕТ
УПРАВЛЕНИЕ ДИСТАНЦИОННОГО ОБУЧЕНИЯ И ПОВЫШЕНИЯ
КВАЛИФИКАЦИИ

Кафедра «Иностранных языков»

Методические указания
по развитию навыков чтения и говорения
по теме «Моя специальность»
по дисциплине

«Английский язык»

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Аннотация

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AN ARCHITECT IN THE CONSTRUCTION OF A BUILDING

1. Discuss the question with a partner.

What parts do the following people play in the construction of a building?

- a) client
- b) contractor
- c) architect

2. Read the text and check your ideas about the parts played in the construction of a building by the client, the contractor and the architect:

When an architect receives a commission for a building, he meets the client and discusses his requirements. After visiting the site, the architect draws up preliminary plans and, together with a rough estimate of the cost, submits them to the client for his approval. If the client suggests changes, the architect incorporates them into the final design which shows the exact dimension of every part of the building. At this stage, several building contractors are invited to bid for the job of constructing the building. When they submit their tenders or prices, the architect assists his client in selecting the best one and helps him to draw up a contract between the client and the contractor.

Work now starts on the building. As construction proceeds, the architect makes periodic inspections to make sure that the building is being constructed according to his plans and that the materials specified in the contract are being used. During the building period, the client pays the bills from the contractor. Subsequently, the contractor completes the building and the client occupies it. For six months after completion there is a period known as the 'defects liability period'. During this period, the contractor must correct any defects that appear in the fabric of the building. Finally, when all the defects have been corrected, the client takes full possession of the building.

3. Complete the following table:

CLIENT	CONTRACTOR	ARCHITECT
appoints an architect	submits tender	a)..... for a building
gives architect his b).	signs a contract with the i)	visits c)
approves e)	starts work on k)	draws up d)
suggests changes	submits l) to client	f) them into the final design
chooses a contractor	o) the building	assists his client in selecting a g)
signs a contract with the j)	corrects defects in the building during the q)	helps client h)
pays m) from contractor		makes n)
p)..... the building		makes sure that the building is completed according to the contract
r)..... of the building		

4. Now find a word or an expression in the text which means:

- a) to be given the job of designing a building
- b) to offer to a client for his consideration
- c) to combine into a whole
- d) to offer to do some work at a certain price
- e) to look at the building work in detail at regular intervals
- f) named or described exactly
- g) an interval of time after the building has been finished during which the contractor is responsible for correcting any faults in it
- h) to have complete ownership of the building

5. Now give three separate descriptions of the parts played in the construction of a building by the client, the contractor and the architect.

ECONOMICS AND MANAGEMENT IN CIVIL ENGINEERING

1. What do you think the duties of an engineering manager are? Discuss your ideas with the class.

2. How does Economics correlate with Management? Express your own point of view.

3. Read the text.

Economics is the study of how consumers, firms and governments make decisions that together determine how resources are allocated.

Management is concerned with the effective use and coordination of materials and labour within organisations in the pursuit of the organisation's defined objectives. The study of management thus encompasses the various processes, procedures and practices that are used in the effective management of organisations. It considers the interrelationship and interactions that must be organised between parts of an organisation and between the organisation and its environment if it is to attain its objectives. Management studies includes the consideration of theories, models, frameworks used by managers as well as the roles of managers in the process of decision-making.

Economics and management are ideal partners. The fundamental philosophy underpinning the course design is to adopt a rigorously intellectual approach to both subjects with the theoretical and the applied being welded together.

Graduates in Economics and Management are amongst the most sought-after. The breadth of the course and the range of skills which it provides have proved attractive to employers in a wide variety of industries. These employers include both leading international organisations in 'traditional activities' as well as new start-up companies in a variety of high-tech fields.

Engineering managers are responsible for primary hiring, on-time performance appraisals, coaching/counseling, employee development and necessary communications to regarding performance issues. They plan, organize, staff, direct and control the engineering function within appropriate guidelines, policies and regulations. They also develop annual budget and coordinate

research.

They may supervise engineers, scientists, and technicians, along with support personnel. They determine scientific and technical goals within broad outlines provided by top executives. Managers make detailed plans to accomplish these goals.

To perform effectively, they also must acquire knowledge of administrative procedures, such as budgeting, hiring, and supervision. These managers propose budgets for projects and programs and determine staff, training, and equipment needs. They hire and assign scientists, engineers, and support staff to carry out specific parts of each project. They also supervise the work of these employees, review their output, and establish administrative procedures and policies — including environmental standards, for example.

In addition, these managers use communication skills extensively. They spend a great deal of time coordinating the activities of their unit with those of other units or organizations. They confer with higher levels of management; with financial, production, marketing, and other managers; and with contractors and equipment and materials suppliers.

4. Answer the questions.

- What is economics?
- What is management?
- What are the key duties of an engineer-manager?
- What skills and knowledge should an engineer-manager possess?

5. Match column on the left to the column on the right to make up collocations.

to carry out...	an approach
sought...	output
to adopt...	making
high-tech...	procedures
annual...	after
to review...	companies
decision...	objectives
to establish...	budget
start up ...	a project
to define...	fields

6. Discuss in pairs:

- What personal characteristics should a manager possess?
- What are the advantages and disadvantages of working in the field of management?

PEOPLE IN COMPUTING

1. Answer this question.

What do the following people in computing do? Compare answers with your partner.

- 1 Webmaster
- 2 Help-desk troubleshooter
- 3 Applications programmer
- 4 Security specialist
- 5 Systems programmer

2. Work in groups of three: A, B and C Read your text and complete this table. You may not find information for each section of your table.

	A	B	C
1) job title			
2) nature of work			
3) formal qualifications			
4) personal qualities			
5) technical skills			
6) how to get started			
7) how to make progress			

Text A

How to become a programming expert

The primary requirements for being a good programmer are nothing more than a good memory, an attention to detail, a logical mind and the ability to work through a problem in a methodical manner breaking tasks down into smaller, more manageable pieces.

However, it's not enough just to turn up for a job interview with a logical mind as your sole qualification. An employer will want to see some sort of formal qualification and a proven track record. But if you can show someone an impressive piece of software with your name on it, it will count for a lot more than a string of academic qualifications.

So what specific skills are employers looking for? The Windows market is booming and there's a demand for good C, C++, Delphi, Java and Visual Basic developers. Avoid older languages such as FORTRAN and COBOL unless you want to work as a contract programmer.

For someone starting out, my best advice would be to subscribe to the programming magazines such as Microsoft Systems Journal. Get one or two of the low-cost 'student' editions of C++, Visual Basic and Delphi. Get a decent book on Windows programming. If you decide programming is really for you, spend more money on a training course.

Text B

How to become a Computer Consultant

The first key point to realise is that you can't know everything. However you mustn't become an expert in too narrow a field. The second key point is that you must be interested in your subject. The third key point is to differentiate between contract work and consultancy. Good contractors move from job to job every few months. A consultant is different. A consultant often works on very small timescales a few days here, a week there, but often for a core collection of companies that keep coming back again and again.

There's a lot of work out there for people who know Visual Basic, C++, and so on. And there are lots of people who know it too, so you have to be better than them. Qualifications are important. Microsoft has a raft of exams you can take, as does Novell, and in my experience these are very useful pieces of paper. University degrees are useless. They merely prove you can think, and will hopefully get you into a job where you can learn something useful. Exams like Microsoft Certified System Engineer are well worth doing. The same goes for NetWare Certification. However, they won't guarantee an understanding of the product, its positioning in the market, how it relates to other products and so on. That's where the all-important experience comes in.

Here's the road map. After leaving university you get a technical role in a company and spend your evenings and weekend learning the tools of your trade and getting your current employer to pay for your exams. You don't stay in one company.

more than two years. After a couple of hops like that, you may be in a good position to move into a junior consultancy position in one of the larger consultancy companies. By the age of 30, you've

run big projects, rolled our major solutions and are well known, Maybe then it's time to make the leap and run your own life.

Text C

How to become an IT Manager

IT managers manage projects, technology and people. Any large organisation will have at least one IT manager responsible for ensuring that everyone who actually needs a PC has one and that it works properly. This means taking responsibility for the maintenance of servers and the installation of new software, and for staffing a help-desk and a support group.

Medium to large companies are also likely to have an IT systems manager. They are responsible for developing and implementing computer software that supports the operations of the business. They're responsible for multiple development projects and oversee the implementation and support of the systems. Companies will have two or three major systems that are probably bought off the shelf and then tailored by an in-house development team.

Apart from basic hardware and software expertise, an IT manager will typically have over five years' experience in the industry. Most are between 30 and 45. Since IT managers have to take responsibility for budgets and for staff, employers look for both of these factors in any potential recruit.

Nearly all IT managers have at least a first degree if not a second one as well. Interestingly, many of them don't have degrees in computing science. In any case, the best qualification for becoming a manager is experience. If your personality is such that you're unlikely to be asked to take responsibility for a small team or a project, then you can forget being an IT manager. You need to be bright, communicative and be able to earn the trust of your teams. Most of this can't be taught, so if you don't have these skills then divert your career elsewhere.

3. Now share the information orally about your text with others in your group to complete the table for each of the occupations described.

APPLIED GEODESY

1. Answer the following questions:

- What is the "geodetic science"? What is it for you?
- What are your plans when you graduate from the university?

2. Comment on the following statement: *"The thinking of every age is reflected in its technology and techniques"*. Give grounds.

3. Match the following words and word groups to the Russian ones:

spheroid geodesy	Маркшейдерское дело (занимается пространственно-геометрическими измерениями в недрах земли и их отображением на планах, картах и др.)
higher survey	Моряк
mining geodesy	Сфероидическая геодезия (изучает геометрию земного эллипсоида и пр.)
arc measurement	Топограф
boundary	Распределять; выделять
to allot	Измерение на дуговых профилях
cadastral survey	Граница, межа
incremental step counter	Компасная съемка
mariner	Подмастерье
land surveyor	Шагомер
journeyman	Высшая геодезия
compass traverse	Кадастровая (межевая) съемка

4. Look through the text and name at least 2 prominent scientists and their contribution to the "geodetic science".

GEODESY: Beginnings

As we all know the general term "geodetic science" includes theoretical or physical geodesy, spheroid geodesy, basic geodetic survey, higher survey, space geodesy, topography, marine geodesy, applied geodesy or engineering geodesy, photogrammetry,

cartography, mining geodesy and mapping. Its fundamental problems are:

- The measurement of the size and shape of the earth.
- Creation of geodesic networks of all types – state, specials high-precision, municipals, locals.
- Creation of the field compilation survey for land, aerial and space survey.
- Coordination setting of moving objects in real time.
- Precise leveling.
- Geodynamic monitoring etc.

As you are well aware Geodesy is one of the oldest sciences in the world. As early as in the year 230 B.C., Eratosthenes (scholar, philosopher, mathematician and astronomer), through his famous first geographical arc measurement between Alexandria and Syene determined the size of earth.

After each of the much desired Nile inundations, the Egyptian land surveyors assigned again plots to the legal proprietors. That was a cadastral survey with restoration of the boundaries. About the training of the Egyptian land surveyors, we know little. They learned presumably as trainees to a chief land surveyor, became, after a corresponding examination, journeyman and then assigned as master-land surveyor with the privilege, to allot private property on ground.

The practical geodesy was so important that every traveller in the former German or British colonies had to add to the cartographic development in Africa - Cameroon, East- and Western Africa - before the First World War. For this purpose, he received an incremental step counter and compass and was instructed in the technique of simple compass traverses. Thus, by using the work of a big number of travelers, large parts of the route net work could be included in the official maps.

In the museum in Skagway in Alaska at the Pacific Ocean we can still admire today which important public role the geodesist has had played there. The Canadian Surveyor General and the surveyors employed by him were responsible for the allotment, registration of gold claims and the regulation of quarrels and therefore directly for the allotment of fortune and poverty.

At the beginning of the 60s the Austrian photogrammetrist Erwin Schneider, using again terrestrial photogrammetry, measured the area around Mount Everest and produced subsequently a map

which today is sold in Kathmandu in Nepal and used by all modern mountaineers coming into this remote area.

Thus we can say with good reason that the thinking of every age is reflected in its technology and techniques. The engineers of past times were land surveyors, astronomers, and mariners. Watchmakers, and lentil grinders were those of the 17th and of the early 18th century. The 17th and the early 18th century was the age of the clocks and the late 18th and the 19th century the age of the steam engines. In such a way, the current time is the age of the communication and of the system controls.

Our profession had its last large climaxes in the second half of the last and the first 20 years of this century in the age of the discoveries. The white spots then disappeared on the maps of South and North America and in Africa and Asia. At this time, it was possible that the highest mountain of earth was named after a geodesist, indeed Sir George Everest.

What may the geodesist expect from the future political development in our country and in the world? Certainly, there will be free movement of the different professions in the different countries. Also we may expect a certain harmonization of law and regulations concerning land and planning. This will correspondingly influence the surveying and geodetic professions. It is to be supposed that a greater freedom of movement will occur for the practice of our profession within our country.

5. Read the text quickly and answer the following questions:

When did geodesy reach its fullest flower?

Who determined the size of the earth for the first time? How did he do it?

What is the future of the "geodetic science"?

6. Read the text again and decide whether the statements are true or false. Correct the false ones.

a. The general term "geodetic science" includes only theoretical, spheroid geodesy, basic geodetic survey and higher survey.

b. The practical geodesy has never been important.

c. The highest mountain of earth was named after a geodesist - Sir George Everest.



d. The profession of geodesist had its last large climaxes in the first half of the last century.

7. Think over the following statement. Make a list of the pros and cons:

"Geodesy is one of the oldest and one of the most important sciences".

8. Work in pairs. Imagine the world without a geodesist. Describe it to the rest of your group.

9. What are the essential qualities of a geodesist nowadays? Have you got the right qualities to be a geodesist? Think and express your point of view.

BRIDGE–BUILDING AND TUNNELING

There can be little doubt that in many ways the story of bridge–building is the story of civilization. By it we can readily measure an important part of people ´s progress.

John Roebling

- 1. Comment on the statement above.**
- 2. Make a list of jobs which use your speciality (eg. Designer, Engineer, Architect etc.)**
- 3. What are your plans when you graduate from the University?**
- 4. Write questions you expect the text to provide answers to.**
- 5. Scan the text and find answers to your questions in the text.**

Glossary:

- a bridge on bracket or cantilever principle – консольный мост
- a bridge on the suspension principle – висячий мост
- a floating bridge – понтонный мост
- a trestle or pile bridge – мост на рамных основах
- a drawbridge – разводной мост

Great rivers are important means of communications for in many parts of the world they have been, and still are, the chief roads. But they are also barriers to communication, and people have always been concerned with finding ways to cross them.

For hundreds of years men have built bridges over fast-flowing rivers or deep and rocky canyons. Early man probably got the idea of a bridge from a tree fallen across a stream. From this, at a later stage, a bridge on a very simple bracket or cantilever principle was evolved. Bridges of this type are still used in Japan, and in India. A simple bridge on the suspension principle was made by early man by means of ropes, and is still used in countries such as Tibet.

All these bridges made possible crossings only over narrow rivers. The type of temporary floating bridge, the pontoon bridge, has been used for military purposes

The idea of driving wooden piles into the bed of the river in order to support a platform was put into practice 3,500 years ago. This is the basis of the 'trestle' or pile bridge which makes it possible to build a wider crossing easier for the transport of animals and goods.

With the coming of the railway in the 19th century there was a great demand for bridges, and the railways had capital for building them. The first railway bridges were built of stone or brick.

The idea of a drawbridge, a bridge hinged so that it can be lifted by chains from inside to prevent passage, is an old one.

A modern bridge probably demands greater skill from designer and builder than any other civil engineering project. Many things should be taken into consideration, and these may vary widely according to local conditions. In deciding what type of bridge is most suitable the designer has to allow for the type and weight of the traffic, and width and depth of the gap to be bridged, the nature of the foundations and the method of erecting the bridge. The designer has to calculate carefully how the various loads would be distributed and to decide which building materials are more suitable for carrying these loads.

Tunnelling is difficult, expensive and dangerous engineering work. Tunnels are built to provide direct automobile or railway routes through mountain ranges, under or over rivers. They can also provide underground channels for water, sewage or oil. Before the 19th century men had not acquired enough skill in engineering to carry out extensive tunnelling. Tunnels, however, were known in ancient times.

Bridges and Tunnels engineers are trained at a Highway Engineering department of Rostov State University of Civil Engineering. The complete course of study takes five years. Students have to assimilate a large amount of new information connected with their future profession. Besides some specialized training they have to study a lot of fundamental subjects as well. The young specialists should acquire theoretical material and get practical skills on their speciality both in the well-equipped laboratories of the university.

After the graduation from the University students become highly-qualified bridges and tunnels engineers able to work in

different companies connected with construction of bridge and tunnels that provides a wide variety of opportunities for young specialists.

6. Read the statements below and complete the table:

It's wrong	that's right	I don't know

1. The bridge that can be lifted by chains from inside is a suspension bridge.
2. Pile bridges are used for very narrow rivers.
3. The first railway bridges were made of timber.
4. Tunnels are built only to provide direct routes through mountain ranges or under or over rivers.
5. Tunnels were quite unknown in ancient times.

7. Work with a partner. Imagine you are going to design a building, a bridge, tunnel, or another structure.

1. Make a list of the questions you should ask before you start and discuss these questions with your partner.

Example: Designing a school → how many children are going to attend school?

→ how many classrooms will they need?

2. Find out information on a famous bridge or building in your country. Who designed it and when was it built? And make a presentation.

TECHNIQUE OF ARTISTIC METAL PROCESSING

1. Answer the following questions:

- What is technique of artistic metal processing and why is it important?
- What does an artistic metal processing specialist do?
- What work is carried out by an artistic metal processing specialist?
- Is techniques of artistic metal processing a good career choice?
- What employment and career opportunities are available in artistic metal processing?
- What skills must an artistic metal processing specialist develop?
- What are your plans when you graduate from the university?

2. Make a list of jobs which use «your speciality».

3. Make a list of things that are important when choosing a job. Compare your lists in pairs.

Example: earning a lot of money, working for a big company...

4. Read the text about technique of artistic metal processing and complete the table with the information from the text:

1)forging	
2)casting	
3)substitution	
4)personal qualities	
5)technical skills	

Technique of artistic metal processing includes **figure castings, forging, coining, engraving, figured carving, enamel creating and other techniques.**

Forging is one of the oldest ways of metal shaping and is still used where strength and toughness is required.

Casting may be used to create artistic sculptures. Casting is a manufacturing process by which a molten material such as metal is

introduced into a mold, allowed to solidify within the mold, and then ejected or broken out to make a fabricated part. Casting is used for making parts of complex shape that would be difficult or uneconomical to make by other methods (such as cutting from solid material). Casting may be used to form hot, liquid metals. Substitution is always a factor in deciding whether other techniques should be used instead of casting. Alternatives include parts that can be stamped out on a **punch press** or deep-drawn, forged, items that can be manufactured by **extrusion** or by **cold-bending**, and parts that can be made from highly active metals.

Artistic metal processing specialists have to be able to interpret engineering drawings and then accurately **cut steel plates into the required shapes**. They must then **weld** them into the structure according to the drawings.

Artistic metal processing specialists must learn to read engineering drawings, use geometric development methods and metal forming techniques. They must also be able to use computers in making metal products, and have a comprehensive knowledge of a range of industrial **welding** and **joining processes** to manufacture the required items.

Techniques of artistic metal processing is an excellent choice for a hard working person who has keen eyes and artistic ability, possibly someone who would like to form their own business, someone who has done woodwork, metalwork, drawing, and the other related subjects at high school.

A good artistic metal processing specialist is never without work. With employment opportunities in building, fabrication, architecture, teaching and artistic fields there is always work available for him.

Artistic metal processing specialists must develop a good eye for all shapes and sizes. Also they must be able to judge material's temperature by eye (colour of steel). Other skills include pre-planning of work, quickness of mind, good hand and eye co-ordination, estimation of costs. Another skill required more and more is the ability to design.

5. Correct the statements below:

a) Forging is one of the oldest ways of metal shaping and is still used where strength and toughness is not required.

- b) Casting is one of the difficult and uneconomical methods.
- c) Casting may be used to form cold metals.

6. Think of arguments for and against the statements:

- a) A good artistic metal processing specialist is never without work.
- b) Techniques of artistic metal processing is an excellent choice for a hard working person.
- c) Metal articles are capable of satisfying man`s aesthetic requirements.

7. Using your ideas, the information and the text try to persuade the rest of the group to accept your views on the statement.

HEAT SUPPLY AND VENTILATION

1. Answer these questions.

- What does the acronym "HVAC" mean?
- Is there a similar word in your language?
- Are HVAC systems important in our modern life? Why?

2. Explain the meaning and the function of each system separately. Discuss your ideas with the rest of the class.

3. Read the text and compare your answers with the information given below:

HVAC (pronounced either "H-V-A-C" or, occasionally, "H-VAK") is an acronym that stands for "**heating, ventilation and air conditioning**". These three HVAC functions are closely interrelated. HVAC systems can provide ventilation, reduce infiltration and maintain pressure relationships between spaces. How air is delivered to and removed from spaces is known as room air distribution.

In modern buildings the design, installation, and control systems of these functions are integrated into one or more HVAC systems. For very small buildings, contractors normally "size" and select HVAC systems and equipment. For larger buildings where required by law, "building services" designers and engineers such as mechanical, architectural or building services engineers analyze, design, and specify the HVAC systems, and specialty mechanical contractors build and commission them. In all buildings, building permits for, and code-compliance inspections of the installations are the norm.

Heating

Heating systems may be classified as *central* or *local*. Central heating is often used in cold climates to heat private houses and public buildings. Such a system contains a boiler, furnace or heat pump to heat water, steam, or air, all in a central location such as furnace room in a home or a mechanical room in a large building. The system also contains piping or ductwork to distribute the heated fluid, and radiators to transfer this heat to the air.

The heating elements (radiators or vents) should be located in the coldest part of the room and typically next to the windows to minimize condensation. The invention of central heating is often

credited to the ancient Romans who installed a system of air ducts in walls and floors of public baths and private villas. The ducts were fed with hot air from a central fire.

Ventilation

Ventilation is the changing of air in any space to remove moisture, odours, smoke, heat, and airborne bacteria. Ventilation includes both the exchange of air to the outside as well as circulation of air within the building. The vents or flues (they are the exhausts from water heaters, boilers, fireplaces) should not be confused with *ventilation*. They carry the products of combustion which have to be expelled from the building in a way which does not cause harm to the occupants of the building. When people or animals are present in buildings, ventilation air is necessary to dilute odours and limit the concentration of CO₂.

Ventilation is one of the most important factors for maintaining acceptable indoor air quality in buildings. Methods for ventilating a building may be divided into *mechanical/forced* and *natural* types.

Mechanical or Forced ventilation

"Mechanical" or "Forced" ventilation is used to control indoor air quality. Excess humidity, odors, and contaminants can often be controlled via dilution or replacement with outside air. Kitchens and bathrooms typically have mechanical exhaust to control odors and sometimes humidity.

Ceiling fans and table/floor fans are very effective in circulating air within a room but do not provide 'ventilation', however.

Natural ventilation

Natural ventilation is the ventilation of a building with outside air without the use of a fan or other mechanical system. It can be achieved with operable windows when the spaces to ventilate are small and the architecture permits. In more complex systems warm air in the building can be allowed to rise and flow out upper openings to the outside (stack effect) thus forcing cool outside air to be drawn into the building naturally through openings in the lower areas. These systems use very little energy but care must be taken to ensure the occupants' comfort.

Air-conditioning

An air-conditioning system, or a stand-alone air conditioner, provides heating, cooling, ventilation and humidity control for all or part of a building. 'Central', 'all-air' air-conditioning systems are often installed in modern residences, offices, and public buildings. Air-conditioned buildings often have sealed windows because open windows would disrupt the attempts of the HVAC system to maintain constant indoor air conditions.

4. Read the text again and decide if the sentences (1-5) below are true (T) or false (F):

1. The heating elements (radiators or vents) should be located in the warmest part of the room and typically far from the windows to minimize condensation.
2. Ventilation is one of the most important factors for maintaining acceptable indoor air quality in buildings.
3. Ceiling fans and table/floor fans are very effective in circulating air within a room and they provide 'ventilation'.
4. "Mechanical" or "Forced" ventilation can be achieved with operable windows when the spaces to ventilate are small and the architecture permits.
5. Air-conditioned buildings often have sealed windows because open windows would disrupt the attempts of the HVAC system to maintain constant indoor air conditions.

5. Make a list of jobs you've come across in the paragraph about HVAC systems. Check the meaning of these words in the dictionary. Compare your list with the rest of the class. Do we have the same jobs in our country?

6. Are you satisfied with HVAC systems in your house? What kind of heating and ventilation have you got? Are they expensive? Do you live in an air-conditioned building? Ask other students in your class the questions concerning HVAC systems (work in pairs, give full answers).

FINANCE AND CREDIT

1. Match the Russian equivalents to the English ones.

1) management of fixed assets	a) управление текущими активами
2) working capital management	b) управление дебиторской задолженностью
3) management of current assets	с) управление основными средствами
4) management of current liabilities	d) управление запасами, материально-техническим снабжением
5) cash management	e) управление денежными операциями
6) receivables management	f) управление краткосрочными обязательствами
7) inventory management	г) управление оборотными средствами

2. Read the text and answer the questions.

- What is the main objective of financial managers?
- What are financial managers responsible for?
- Where can a graduate from Finance and Credit Department work?
- What is the structure of Russian Banking System?
- What is the function of CBR?

Any business- whether large or small, profit-seeking or not-for-profit – has important financial concerns:

How to get the funds needed to run the business on favourable terms and how to make sure that the funds are used effectively? In this connection modern businesses have financial managers to look after these problems, whose major objective is to maximize the value of the firm for its owners.

Financial managers are primarily concerned with the management of fixed assets, working capital management, including management of current assets and current liabilities, cash management and inventory management; they are responsible for

designing capital structure choosing long- and short- term financing techniques.

As a graduate from Finance and Credit Department I can apply my knowledge in Banking sphere as well. The Banking system of Russia has made tremendous progress. It is organized as a 2-tier system. The first tier is representations of foreign banks. The CBR of Russia guarantees the stability of the national currency and the banking system. It supervises the activities of commercial banks, issues and withdraws licenses for performing banking operations. Working in the banking sphere is interesting, challenging and perspective.

3. Give the English equivalents:

- a) благоприятные условия
- b) прежде всего, главным образом
- c) долгосрочный, краткосрочный
- d) применить
- e) огромный, потрясающий
- f) представительство
- g) валюта
- h) выдавать/отзывать лицензии

4. Make your own sentences with these words.

5. Work in pairs. Discuss things that are important when choosing a job.

Example: earning a lot of money, working for a big company...

THE FIELD OF ACCOUNTING

1. Answer the questions.

- a) What are your plans when you graduate from the university?
- b) Work in pairs. Make a list of things that are important when choosing a job, e.g., earning a lot of money, working for a big company.

2. Read the text.

Accounting frequently offers the qualified person an opportunity to move ahead quickly in today's business world. Indeed, many of the heads of large corporations throughout the world have advanced to their positions from the accounting department. Management relies on the expert knowledge and experience of accountants to cope with the increasingly complex problems of taxes and cash flow.

Accounting is a basic and vital element in every modern business. It records the past growth or decline of the business. Careful analysis of these results and trends may suggest the ways in which the business may grow in the future.

Accounting is one of the fastest-growing fields in the modern business world. The present-day accountant's job developed from the bookkeeper's job. Today, a sharp distinction is made between the relatively unchanged work performed by a bookkeeper and the more sophisticated duties of the accountant. The bookkeeper simply enters data and figures financial record books, the accountant must understand the entire system of records so that he or she can analyze and interpret business transactions. Because interpretation of the figures is such an important part of the accountant's function, accounting has often been described as an art.

The field of accounting is divided into three broad divisions: public, private and governmental.

CPAs can offer their services to the public on an individual consultant basis for which they receive a fee. In this respect and many others, they are similar to doctors or lawyers.

Public accounting consists largely of auditing and tax services. An audit is a review of the financial records of an organization.

Many accountants work in government offices or for nonprofit organizations. These two areas are often joined together under the term governmental and institutional accounting.

The two are similar because of legal restrictions in the way in which they receive and spend funds. Therefore, a legal background is sometimes necessary for this type of accounting practice.

Private accountants, also called executive or administrative accountants, handle the financial records of a business. Like those who work for the government or nonprofit organizations, they are salaried rather than paid a fee.

Managerial accountants are other specialists within the broad area of private accounting. In particular, they work with the kinds of financial reports necessary to management for the efficient operation of the company, including budgets and cash flow projections. The chief accounting officer of a company is the controller. Controllers measure the company's performance, interpret the results of the operations, and plan and recommend future action. Many people have chosen accounting as a profession because of its many advantages. Salaried positions with business or government offer strong security, since accounting work is not usually subject to either short-term changes or long-term trends in the business cycle. Salaried accountants are not as likely to be affected by layoffs or seasonal changes in the work load as are industrial or clerical workers.

3. Prove that you understood the text. Answer the following questions.

- a) What does accounting frequently offer the qualified person?
- b) Explain how accounting is a basic and vital element in modern business.
- c) How does the job of a bookkeeper differ from that of an accountant?
- d) Why has accounting been described as an art?
- e) What are the three broad divisions in the field of accounting?
- f) What does CPA stand for? What do you think is the significance of the word *certified*?
- g) In what way are governmental and institutional accounting similar? What kind of background is sometimes necessary for this kind of work?
- h) What are some of the advantages of accounting as a field of employment?
- i) What qualifications are necessary for success in the field of accounting?

j) Why do salaried accounting jobs offer security?

4. Match the phrase on the left with the statement on the right.

1) Accounting	a) the chief financial officer of an organization
2) Bookkeeping	b) the actual receipt and expenditure of cash by an organization
3) Certified Public Accountant(CPA)	c) a review of an organization's financial records by an accountant.
4) Cash flow	d) the systematic recording of financial information.
5) Management	e) anything of value or use to an organization(cash,receivables, securiyies, property and intangibles)
6) Audit	f) an accountant who has passed a series of examinations and received a certificate or license
7) Asset	g) the planning and direction of the policy and operations of an organisation people who carry out the functions of management.
8) Governmental and Institutional Accounting	h) a branch of accounting that deals with financial reports which are particularly useful to management in establishing operating policies for an organization.
9) Managerial Accounting	i) a specialized branch of accounting that deals with government agencies or nonprofit organizations.
10) Controller	j) the recording,clsssifying, summarizing, and interpreting of those business activities that can be expressed in monetary items.

5. Fill in the spaces in the following sentences with the appropriate word or phrase.



1. The _____ sets up a complete system for recording and analyzing the financial affairs of an organization, whereas the _____ enters figures for financial transactions in the company's records.

2. CPA is an abbreviation for _____.

3. A CPA is considered a professional nowadays, like a _____ or a _____.

4. _____ establishes policies and directs the operations of an organization.

5. A review of the financial records of an organization by an accountant is called an _____.

6. A _____ organization is not in business to make money.

7. _____ are things of value that are owned by a company.

8. The chief accounting officer of an organization is usually called the _____.

9. Private and government accountants usually work on a _____ basis, whereas public accountants usually work on an _____ basis.

10. _____ accountants specialize in the preparation of reports, such as budgets or cash-flow projections, that are particularly necessary for the management of a company.

6. Let's have a talk!

A. Name some specific jobs that involve bookkeeping skills. What are those skills? What duties are involved in such jobs?

B. What are some of the qualifications, both technical and personal, that you believe an accountant must have in order to achieve success in his or her field? How do these relate to the duties that are involved in accounting?

C. What do you consider to be the advantages and disadvantages of a career in accounting?

THE SCOPE OF MARKETING

1. Answer these questions.

- a) What are you specialized in?
- b) Does it involve marketing? How?

2. Read the text and make up a plan of it. Choose key-words to each point of your plan.

The transfer of goods from one person to another was probably one of our earliest social acts. As societies grow more complex, so does the transfer of goods.

The basic motive for trading is that someone has something you want more than what you already have. When that someone is willing to exchange what you want for what you have, a mutually satisfactory transaction can be arranged. Then, trade is the exchange of surplus items for shortages of items. The reasons for having surplus items range from geographic and resource variations to division and amount of labor, skill variation, and differences in taste. One group or person may create a surplus of some product in the hope of profitably exchanging it for other products.

As society and production expanded, so did the limits of trade, the range of goods, and the distance between the traders. It became increasingly difficult for the producers to locate each other and arrange mutually satisfactory exchanges without the help of intermediaries or "middlemen". These intermediaries, in the role of bringing together interested parties, must perform a variety of tasks which can be called **marketing**.

As defined by the American Marketing Association, marketing is "the performance of business activities directed toward the flow of goods and services from producer to consumer or user." Marketing, therefore, is made up of such physical activities as transporting, distributing, storing, and selling goods, and of the decisions which must be reached by individuals or groups who want to move goods from production to use. Of course, not all producers engage in every marketing activity. The local carpenter in Guatemala or the supermarket manager in Japan does not do product planning; most retail stores around the world have few or no storage facilities. However, most products are repeatedly subjected to all marketing operations. So, marketing involves understanding the consumer

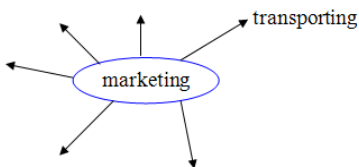
circumstances and attitudes that determine why certain people want certain products.

The following questions face those involved in marketing: How should the product be designed? How should it be packaged? What retail and/or wholesale channels should be used? Is advertising advisable? If so, how much and what kinds? What prices should be set? Will it sell, and to whom?

In general, marketing directs the flow of goods and services from producers to consumers or users. Marketing is not confined to one particular type of economy; goods in all but the most primitive societies must be marketed. Indeed, a broader concept of marketing does not limit its application to business enterprises. Schools, hospitals, libraries, and many other services must also be marketed to be used.

Although marketing activities have expanded tremendously in the past hundred years, there was little formal study of them until the past few decades. Today, there are many publications on the various aspects of marketing and different institutions give courses and degrees in this field. Marketing research has developed into a highly specialized activity employing tens of thousands of people around the world.

3. Read the text again and complete the spidergram:



4. Match the following notions with their definitions:

1) goods	the planning and promotion of sales through attractive publicity. (This has many marketing definitions which will be redefined as needed.)
2) barter	the work provided for others as an occupation or business.
3) marketing	the sale of goods to ultimate consumers, usually in small quantities. A manufacturer has a choice of selling directly to the consumer, to a <i>retailer</i> , or to a <i>jobber</i> , a person who then sells to a retailer.
4) services	that amount which is greater than what is used or needed; the opposite of <i>shortage</i> , a deficiency in goods or money. <i>Deficit</i> , a shortage of money, can also be an opposite.
5) retail	those business activities that direct the movement of goods and services from producers to consumers or users. This includes product planning and design, sales, sales promotion and advertising, distribution, and pricing.
6) surplus	trade or exchange of goods or services without the use of money.
7) merchandising	articles of trade or commerce; wares; merchandise; products, as distinguished from <i>services</i> .

5. Discuss in pairs the following items:

- 1) how the practice of trade began.
- 2) the basic motive for trading
- 3) what can be called marketing
- 4) what marketing directs
- 5) the major questions marketing people ask.

LITERATURE AND THE INTERNET RESOURCES

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