#### КОНТРОЛЬНАЯ РАБОТА

Рекомендуется изучить следующий грамматический материал:

- **1. Имя существительное.** Множественное число. Артикли и предлоги как показатели имени существительного. Выражения падежных отношений в английском языке с помощью предлогов и окончания —s. Существительное в функции определения и его перевод на русский язык.
- **2. Имя прилагательное.** Степени сравнения имен прилагательных. Конструкция типа the more .. the less.
  - 3. Числительные.
- **4. Местоимения:** личные, притяжательные, вопросительные, указательные, возвратные, неопределенные и отрицательные.
  - **5. Наречия.** Степени сравнения наречий.
- **6. Глагол.** Изъявительное наклонение глагола и образование видовременных групп. Активная и пассивная формы. Особенности перевода пассивных конструкций на русский язык.
- 7. Простое распространенное предложение: прямой порядок слов повествовательного и побудительного предложений в утвердительной и отрицательных формах; обратный порядок слов вопросительного предложения. Оборот there is (are).
  - 8. Основные случаи словообразования.

# Контрольное задание №1

#### ВАРИАНТ 1

I. Перепишите следующие предложения.	. Переведите их на русский
язык. Определите по грамматическим призн	накам, какой частью речи
являются слова, оформленные окончанием -	–s и какую функцию это
окончание выполняет, т.е. служит ли оно:	

a)	показателем	3-го	лица	единственного	числа	глагола	В	Present
Indefinite;								

- b) признаком множественного числа имени существительного;
- с) показателем притяжательного падежа имени существительного
- 1. Some American banks and companies conduct transactions over the Internet.

a) –s	b) –s	c) –s

2. Mr. Hall *delivers lectures* to the *students* of a technical college. a) –s b) –s c) –s

3. Over the *centuries man's* way of life was changed by a relatively small number of *discoveries* and *inventions*.

a) -s b) -s c) -s

• • •	are under investigation in	
a) –s	b) –s	c) –s
5 A computer exector	a consists of a number of d	ifforent units
a) –s	n <i>consists</i> of a number of da b) —s	c) –s
a) –s	0) –8	c) –s
II Пепениците сп	едующие предпожения	и переведите их, обращая
_	-	ский язык определений,
выраженных именем суи		enuu noon onpecanenuu,
_	devices to control the powe	r system.
	have been classed into three	
<u> </u>	d in the world in robot pro	•
<u>-</u>		grammable machine-tool and
an electronic control system		
•	esel invented a new interna	l combustion engine.
<b>Изучите тему:</b> Ст	епени сравнения прилагат	пельных и наречий.
III. Выполните т	пест. Письменно пере	гведите предложения на
русский язык.		
1. TheInterne		
a) more popular	b) most popular	c) popularest
0.75	.1	
	the its resistance.	\ .1 · 1
a) thicklittle	b) thickestleast	c) thickerless
2 It is to day the	an it was wastanday	
3. It is today the		a) the coldest
a) colder	b) cold	c) the coldest
4 The results of his l	ast experiment were	than before
	b) worse	c) the worst
a) more oud	o) worse	c) the worst
5. There is a tradition	n in England to hold a rally	y in which only thecars
take part.	—8	,
±	b) most old	c) oldest
,	,	,
Изучите тему:	Личные, притяжать	ельные, вопросительные,
-	_	ицательные местоимения.
IV. Выполните т	ест. Письменно пере	еведите предложения на
русский язык.		
1. They made these e	-	
a) their	b) themselves	c) ourselves

4	2. The students	have already discussed the	questions of practical
training			
a) ther	n	b) they	c) their
3	3. I've got vid	leo cassettes in English.	
a) any	•	•	c) some
, ,		, 8	,
۷	4engineer v	vorking in this field can give y	ou this information.
a) any		b) no	c) some
4	5. Are there	tools in the workshop?	
a) any		b) some	c) anything
видовр пассив	еменных групп ных конструкци	(активная и пассивная фор ий на русский язык).	ие глагола и образование мы; особенности перевода
	V. Выполнит <i>е</i>	тест. Письменно пере	ведите предложения на
	V. Выполните ий язык.	тест. Письменно пере	ведите предложения на
русски	ий язык.	mecm. Письменно пере al combustion enginei	-
русски	<b>й язык.</b> l. The first intern	-	n 1876.
pyccки a) has	ий язык.  1. The first intern been introduced  2. Many kinds of	al combustion enginei b) was introduced computersin the wo	n 1876. c) introduced orld.
pyccки a) has	ий язык.  1. The first intern been introduced  2. Many kinds of	al combustion enginei b) was introduced	n 1876. c) introduced orld.
a) has	ий язык.  1. The first intern been introduced  2. Many kinds of manufactured	al combustion enginei b) was introduced  computersin the wo b) manufacture  1 Albert Einstein a job a	n 1876. c) introduced orld. c) is manufactured s a clerk in an office.
a) has	ий язык.  1. The first intern been introduced  2. Many kinds of manufactured	al combustion enginei b) was introduced  computersin the wo b) manufacture	n 1876. c) introduced orld. c) is manufactured
a) has a) are a) get	ий язык. 1. The first intern been introduced 2. Many kinds of manufactured 3. At the age of 2	al combustion enginei b) was introduced  computersin the wo b) manufacture  1 Albert Einstein a job a b) have got	n 1876. c) introduced  orld. c) is manufactured  s a clerk in an office. c) got
a) has a) are a) get	1. The first intern been introduced 2. Many kinds of manufactured 3. At the age of 2 4. Today we	al combustion enginei b) was introduced  computersin the wo b) manufacture  1 Albert Einstein a job a	n 1876. c) introduced  orld. c) is manufactured  s a clerk in an office. c) got
a) has a) are a) get	ий язык.  1. The first intern been introduced  2. Many kinds of manufactured  3. At the age of 2  4. Today we  5. The machines _	al combustion enginei b) was introduced  computersin the wo b) manufacture  1 Albert Einstein a job a b) have got in the age of technology and b) live next month.	n 1876. c) introduced  orld. c) is manufactured  s a clerk in an office. c) got  information. c) lived
a) has a) are a) get	ий язык.  1. The first intern been introduced  2. Many kinds of manufactured  3. At the age of 2  4. Today we  5. The machines _	al combustion enginei b) was introduced  computersin the wo b) manufacture  1 Albert Einstein a job a b) have got in the age of technology and b) live next month.	n 1876. c) introduced  orld. c) is manufactured  s a clerk in an office. c) got  information.

### WHAT IS A ROBOT?

What is a robot? A lot of people think of robots as machines that both do the work of humans and look like them. Strictly speaking, these devices should be termed androids, from the Greek «andros» meaning "of man" and «aidos» meaning "form". A number of androids have indeed been created; but they have been mostly for amusement value.

So how should we define a robot? A robot is a gadget which wholly or in part imitates man - sometimes in appearance and sometimes in action. Thus a machine which simulates, say, the action of a person's limb can be called a robot.

Likewise a machine that walks up and down and gives a passable impression of smoking a cigarette can also be bracketed in this category.

There are few microelectronic applications more likely to raise fears regarding future employment opportunities than robots for the very obvious reason that such machines directly replace human labour. The emotive nature of the subject inevitably gives rise to misapprehensions.

It is necessary first to define an industrial robot. Alternative definitions and classifications abound but basically a robot is a machine which moves, manipulates, joins or processes components in the same way as human hand or arm. It consists basically of three elements: the mechanical structure (including the artificial wrist and gripper), the power unit (hydraulic, pneumatic or, increasingly, electrical) and the control system (increasingly minicomputers and microprocessors). However, the essential characteristic of a robot is that it can be programmed. Thus many devices (often called robots) would be better termed "numerically-controlled arms", since they are mechanical arms controlled by simple (non-computer) software and as such are not radically different to much existing automation equipment. There are reported about 20000 of the latter in use in Japan, and perhaps several thousand in the United Kingdom. A robot, however, is here defined as a hybrid of mechanical, electrical and computing engineering.

#### ТЕСТ ПО ТЕКСТУ

# VII. Выберите правильный ответ и переведите предложения на русский язык.

- 1. How should we define a robot?
- a) Robots are machines that both do the work of humans and look like them.
- b) The devices that should c) A robot is a machine be termed androids.
  - which wholly or in part imitates man.
- 2. What are three basic elements of a robot?
- a) the mechanical structure, the power unit, the control system
- b) the power unit, software, automation equipment
- c) the mechanical structure, hydraulic power unit, microprocessor
- 3. What is the most significant manifestation of «flexible» automation? a) minicomputer b) hardware c) industrial robot
  - 4. What are the tasks most robots in current use handle?
- a) controlling
- b) welding, paint
- c) solving mathematical
- spraying, machine loading problems
- What industries are the biggest users of robots? 5.
- a) machine-building and metal working industries
- b) architecture and civil engineering
- c) metal working and automobile industries

6. What are the rea a) improvement of working conditions	sons for the introductio b) low price	n of robots into the work place? c) availability of robots
	ВАРИАН	T 2
язык. Определите по являются слова, офорокончание выполняет, а) показателем Indefinite; b) признаком мног	грамматическим примленные окончанию тельные окончанию тельно оно: 3-го лица единствен жественного числа им	ния. Переведите их на русский ризнакам, какой частью речи ем -s и какую функцию это нного лица глагола в Present ени существительного; а имени существительного
1. The Internet, a over the world.	global computer netwo	ork embraces millions of users all
a) –s	b) -s	c) –s
a) –s	search work is of great int b) –s	c) –s
a) –s	ny <i>efforts</i> to find new <i>s</i> <sub>0</sub> b) –s	ources of energy.
	rains engineers in more b) –s	e than 40 <i>specialities</i> . c) –s
5. Some of <i>Britain</i> a) –s	's top <i>scientists</i> are enga b) –s	aged in space research.
внимание на особени выраженных именем с 1. Metallurgists stu 2. The nuclear - roo 3. The new model o 4. High speed ele technological problems.	ности перевода на уществительным. dy a new class of alloys eket engine must be the of the device will be we	orked at in the plant laboratory.  Let p the engineers to solve many

14

III. Выполните тест. Письменно переведите предложения на

Изучите тему: Степени сравнения прилагательных и наречий.

русский язык.

	chnology is the	growing technology in the world
today. a) faster	b) most fast	c) fastest
		eans of communication between the
spaceship and the Eartl a) reliablest		c) more reliable
a) easiest	b) easier	udents than subjects of humanities. c) more easy
4. Your advice is a) most important	b) more important	c) less important
	ought of that plan, the _ b) most least	I liked it. c) moreleast
		пяжательные, вопросительные, г и отрицательные местоимения.
русский язык.	ve your specifications	переведите предложения на for turbines? We'd like to study
a) they	b) their	c) them
2. The student w a) his	ill continueresearc b) him	ch in a laboratory. c) himself
3. He didn't kno a) no any	w name of all me b) any	entioned in the report. c) some
, •	, <b>,</b>	,
a) some	s exactly how many peo b) any	c) nobody
5. This scientist a) some	works at problem b) any	ms of low temperature physics.
	(активная и пассивн	клонение глагола и образование ая формы; особенности перевода
русский язык.		о переведите предложения на one all-absorbing interest for many

a) had become	b) has become	c) have become
2. Our company	electronic componer	its for washing machines.
a) are producing	b) produce	c) produces
3. Today scientists _	stillthe substa	ance as a source of energy.
a) is looking for	b) are looking for	c) were looking for
4. The intensity of th	is processby many	factors.
a) is influenced	b) influenced	c) has influenced
5. In two years my b	rotheran engineer	
a) has become	b) becomes	c) will become

# VI. Прочитайте и устно переведите текст.

### **COMMUNICATION TECHNOLOGIES**

We are living in the age of swiftly changing and developing communication technology. Among these changes is an increasing use of rapid communication devices for both interpersonal and public communication.

New media of communication alter the communication process itself. Each new medium imposes special requirements on the ways in which messages are formulated; it controls the speed and convenience with which information is transmitted or recorded; and it influences ways in which receivers reconstruct meanings from the messages they receive. New media also lead to significant changes in the social, economic, and cultural features of society.

The telephone, along with associated devices such as answering machines and voice-mail networks, continues to be one of the most widely used and important media in our society. It is so familiar that people often fail to follow appropriate norms of usage procedures that can make it a more effective means of communication. An old medium (fax) using long-distance lines has gained in popularity as a means of transmitting written messages quickly and inexpensively.

Increasing use is being made of computer networks of various sizes and complexities for the transmission of many categories of information. Electronic mail is typed into a sender's computer to be read on screen at his or her convenience. E-mail is very fast and convenient, and it is replacing slower, paper media for many purposes.

Larger networks of computers linked together in local, national and international systems become now available and they are creating a quiet but profound communication revolution. It has already brought remarkable modifications in the ways by which people communicate in our society. An example is Internet which brings together 2000 other networks in 35 countries. People are able to exchange written messages more rapidly on a worldwide basis. With a 10-cm movement of your mouse and a click of a button you can jump from Australia to Europe in less time than it takes to read this paragraph.

With the various media by which we can communicate quickly and over large distances we must ask how these will have an influence on the human condition.

Will we be brought closer together or will the new communication technologies enable a minority of human beings to become information rich while the vast majority remains outside these systems and information poor?

# ΤΕСΤ ΠΟ ΤΕΚСТУ

VII. Выберите про	пвильный ответ и перев	ведите предложения на
русский язык.		
1. We are living in an a) of fax machine, cellular phones, home offices and worldwide communications	age b) of quickly changing and developing communication technologies	c) of transition from the defense industry to the commercial sector
2. Telephone is an a) for transmitting the sound of the voice by electricity	b) for making copies of documents and sending them down telephone lines to another place	c) for sending information from one computer down telephone lines to another computer
3. New media of a) translation from visual language into a verbal language, much as a foreign born person thinks in his native tongue and then translates in his mind before speaking in English	b) significant changes in the social, economic and cultural features of society	c) a quiet but profound communication revolution
4. Fax machine is a) transmitting written messages quickly and inexpensively	a means of b) copying documents and sending them down telephone lines to another place	c) recording moving pictures and sound
5. Electronic mail a) typed into a sender's computer to be read on screen at his or her convenience	is b) the government system of carrying and delivering letters	c) beginning to replace paper media as it is very fast and more convenient

	ous media	
a) we can communicate quickly and over large	b) a minority of people is sure to become	c) a majority of people is certain to become
distances		
	Контрольное задание	e №2
	ВАРИАНТ № 1	
показатели имени суще английском языке с пом	ествительного. Выражени	Артикли и предлоги как я падежных отношений в иия – <b>s</b> . Существительное в к.
	тест. Письменно пере	ведите предложения на
русский язык.  1 The basic concer	ots of data processing are rest	ricted computers alone
a) to	b) with	c) for
2. Computers are ca	npable of communicating	the user.
a) for	b) with	c) on
3. There are three s	teps that are involved thi	s process.
a) to	b) on	c) in
4. There are number	rs of characteristics essential	any robot.
a) to	b) from	c) of
5. Industrial robo manipulator, the power ur		owing basic elements: the
a) of	b) according to	c) for
6. Robot capabilitie movements.	es range very simple mot	tions extremely complex
a) from to	b) into	c) for for
Изучите тему: Ч II. Напишите ці		ительные и действия с
ними:		
1. Three quarters		
2. Five and two thir	rds	
5. Nought point not	ight four	
5. Fight by two equ	nt one nought five	
6. Six multiplied by	als four two is twelve	
o. Sin manipiled by		

7. Four from ten is six	
8 Nine degrees below 7	ero

**Изучите тему:** Простое распространенное предложение: прямой порядок слов повествовательного и побудительного предложений в утвердительной и отрицательных формах; обратный порядок слов вопросительного предложения. Оборот there is (are).

# III. Из данных слов составьте предложения и письменно переведите на русский язык.

- 1. Many changes computers as we know have gone through them today
  - 2. For storing data was used for magnetic tape or input output
  - 3. One of the most ancient occupations in history is engineering
- 4. Made-man is for who humans serves works a robot and them a man
  - 5. Change the communication process did this new media how?
  - 6. The main purpose is of any man/machine system what?

# IV. Прочитайте и устно переведите текст.

### A MAN / MACHINE SYSTEM

Any form of tool or complex machine which is used by a man forms a man/machine system. The purpose of the system may be to get a man or goods from one place to another; it may be to communicate, or it may be to manufacture some useful objects or to mine coal out of the ground. Here we try to describe a man/ machine system as the machine becomes more complex and relieve the man of many mechanical tasks.

Level 1 is the simple machine in which a man provides the power as well as the controlling skill. Some examples are the woodman's axe, the carpenter's saw, mallet and chisel, and the hand-pulled or -pushed cart, trolley. The tool or machine can be regarded as an extension of the man's body since he grasps it firmly and guides its motion directly with his own muscular effort.

Level 2 is the powered machine or tool. The power may come, for example, from an animal as in the case of a horse-drawn cart, from wind as for the sailing ship and the windmill. Here the man is fully responsible for controlling the system but he requires devices such as switches, pedals and steering wheels to control the power system.

Level 3 is simple automation. The single-process machine or a tool with built-in auto-control can perform any process whenever it is fed with raw materials by the operator. It has its own source of power. An example is the automatic lathe in use early in the 20th century.

Level 4 is the man extender. These are the machines which carry out complex programmes for which they are instructed by the man. But they only do these when a man is telling them to do that particular job. One example in use at

present is the digital computer which is capable of doing very quickly any operation of very great complexity.

Level 5 is the robot. This is the system which is powered and programmed to produce a succession of identical products or carry out a series of similar operations. The human can instruct the robot to vary its actions in accordance with variations which it observes in the surrounding situation.

### ТЕСТ ПО ТЕКСТУ

	вильный ответ и перес	ведите предложения на
русский язык.		
1. A man/machin	ne system is	
a) an extension of the	b) a complex machine	c) a mechanical
man's body	used by a man	manipulating device
2. The purpose of	of a man/machine system is _	·
a) to provide the	b) to supervise and	c) to manufacture some
objective, design and	b) to supervise and maintain the machines	useful objects
build the machines		
3. For controllin	g the power system of the	powered machine or tool a
man requires devices such	as	_
a) mallet and chisel	b) switches and pedals	c) nuts and screws
	,	
4. There are a lo	t of machines or tools whose	e input is a natural source of
		-
a) wind and water	b) steam and petroleum	c) an alternating current
,	, 1	of electricity
		<b>,</b>
5. The systems	powered and programmed	to produce a succession of
	out a series of similar operat	
	b) powered machines	
,	/ <b>1</b>	,
6. Machines cap	pable of processing large an	nounts of data very quickly
are known as	1 6 6	<b>J</b> 1
a) industrial robots	b) internal combustion	c) computers
-,	engines	1) 111-F
	ВАРИАНТ № 2	

**Изучите тему:** Имя существительное. Артикли и предлоги как показатели имени существительного. Выражения падежных отношений в английском языке с помощью предлогов и окончания –s.

I. Выполните тест. Письменно переведите предложения на русский язык.

	1. People can refer books of various kinds to find the information they				
need.					
a) to		b) in	c) of		
		es are stored various sto	orage devices such as		
magn	etic tapes or magnetic	discs.			
a) wit	h	b) on	c) in		
3. Robots are best understood terms of their capabilities.					
a) wit	h	b) by	c) in		
	4 7 1	.00	1.		
		ffer other automatic m			
a) wit	h	b) from	c) in		
	5 D 1 . (	C 1			
		four basic design variations			
a) wit	n	b) in	c) according to		
	6 Robots are used to	load and unload parts	connection other		
machi		Todd and unload parts	connection other		
a) in.		b) on to	c) at from		
a) III.	WIIII	b) on to	c) at Hom		
	Изучите тему: Чис	$^{\circ}$ ПИМ $ ho$ ПЬНЫ $ ho$			
II. Напишите цифрами следующие числительные и действия с					
ними	· -				
	2. Two fourths				
	3. Nought point one nought six				
	4. Ninety three point eight four six				
	6. Five multiplied by seven is thirty five				
	7. Seven from fifteen is eight				
	8. Eleven degrees below zero				
	8. Eleven degrees bel	ow zero			

**Изучите тему:** Простое распространенное предложение. Прямой порядок слов повествовательного и побудительного предложений в утвердительной и отрицательных формах; обратный порядок слов вопросительного предложения. Оборот there is (are).

# III. Из данных слов составьте предложения и письменно переведите на русский язык.

- 1. Sometimes are designed for computers a particular purpose
- 2. Already different areas is microcomputer technology being utilized in
- 3. Should take responsibility an engineer his goals for achieving
- 4. In a machine shop is designed every machine-tool for a special machining operation used

- 5. The word «automation» does what mean?
- 6. The main steps are for solving what any engineering problem?

# IV. Прочитайте и устно переведите текст.

# WHAT IS ENGINEERING?

Engineering is putting knowledge of Nature to practical use. The end result of engineering is some physical thing: a machine, a tool, a gadget. Engineering is solving problems. It's convenient to discuss engineering projects within the framework of five steps for solving problems:

<u>Define the problem.</u> Defining the problem often means distinguishing the perceived need from the real need. The fact that engineering results in something of practical use implies the existence of a user - a customer. The problem you're solving had better be a customer's point of view.

Identify possible solutions. Engineering is synthesis - putting together various parts in a new way to create value. Bring the problem into a familiar medium. If you're a mechanical engineer designing an electrical circuit, you can think in terms of a mechanical analogy, such as water flowing in pipes. Do whatever it takes to let your intuition start working. Conscious thought, intuition, passion, emotion, sight, hearing, touch - even taste and smell - can help. With a little practice, you can smell the difference between numerous metals, and your unaided eye can distinguish between lights flashing at 100 Hz and 500 Hz. Part of engineering discipline is paying attention to things around you to see how they work. In many situations, the human system is more powerful than any sensor. You can see a lot just by observing.

<u>Select a solution.</u> The objective is to select from many possible solutions the one that gives you the "best" results. Engineering is seeking the best compromise between a whole bunch of conflicting demands. Engineering is optimizing.

Implement the solution. Most engineers don't succeed because they don't take enough initiative. The most important thing is to act. Take responsibility for achieving the goal, for contributing to each aspect of it, for getting pieces of it done. Young engineers are accustomed to dealing with textbooks with nicely formulated problems that contain one or two variables applicable to the particular class, and everything else is assumed to be nominal. But in almost every real-world situation, it's the assumptions that get you, not the stated questions.

<u>Verify the solution.</u> Turn the product on. Watch it work. Use it as a customer would. Listen to customers who use it. Two things will happen. You will learn whether the product is what you said it would be, and you will discover other uses and opportunities for improvement that may not have been apparent at the beginning. You will often see the original problem in a new perspective once a solution has been implemented.

The way we follow these five steps determines the success or failure of our products - and our careers.

# ТЕСТ ПО ТЕКСТУ

V. Выберите прав	вильный ответ и перев	едите предложения на
русский язык:		
1. The end result of enginee	ering is	
	b) some imaginary thing:	· · · · · · · · · · · · · · · · · · ·
machine, a tool, gadget	an idea, an opportunity, an objective	career, money, power
2. Defining the engineering	problem often means	·
a) bringing he problem into a familiar medium	•	
3. Part of engineering discip	pline is	
a) developing the	b) paying attention to	c) examining yourself
problem-solving skills	things around you to see how they work	carefully and honestly trying to understand your limitations
4. Most engineers don't suc	ceed .	
a) because they tend to be		c) because they don't have enough initiative
5. Young engineers are acc	ustomed to	
	b) relying on other people	
with nicely formulated problems	in solving problems	motivation to become first –rate engineers
6. If you are a mechanical e	engineer designing an electri	ic circuit
a) you can think in terms	b) you should know how	c) you can read
of a mechanical analogy	to grind and polish a lens	blueprints