



Английский язык в профессиональной деятельности.oi(dor_БАК(1/2)_221201_ПивЭ, Б-И, МОиАИС)

- 1 The slide rule in its basic form uses ... logarithmic scales to allow fast multiplication and division of numbers
- 2 Burroughs converted to electronic desk ... and in the mid to late 1970s their products dropped from the market
- 3 In 1936, Alan Turing invented a universal machine, which was later called ...
- 4 The first recognized use of the word “computer” was from ...
- 5 The explosion in world population and the rise of globalised trade demanded even faster and more flexible tools for processing ...
- 6 A general-purpose computing device called the analytical engine was developed in 1837 by ...
- 7 The ... is a small-scale special-purpose electronic digital machine for the solution of systems of linear algebraic equations and the first electronic computer incorporating vacuum tubes for digital computation
- 8 ... are made for program logic and for computer memory
- 9 Open the brackets, put the verb in the correct form in sentence: “The power of computers (double) ... roughly every 18 months to 2 years since the 1960s”
- 10 Open the brackets, put the verb in the correct form in sentence: “What will the computers of the future (look) ... like?”
- 11 Open the brackets, put the verb in the correct form in sentence: “Displays (attain) ... VGA resolution by 1988, and 256-color screens were available by 1993”
- 12 Open the brackets, put the verb in the correct form in sentence: “Resolutions and colors of computers (progress) ... quickly by 2022”
- 13 Open the brackets, put the verb in the correct form in sentence: “Years ago this service (can) ... be used to run algorithms and experiments, and explore tutorials and simulations around what might be possible with quantum computing”





- 14) Open the brackets, put the verb in the correct form in sentence: "Around the same period Intel (create) ... three microprocessor designs"
- 15) Open the brackets, put the verb in the correct form in sentence: "The microchip which (be) ... a key component in the development of the personal computer"
- 16) Open the brackets, put the verb in the correct form in sentence: "In 1944 Howard Aiken (develop) ... Mark I that could perform calculations involving large numbers"
- 17) Match machines to their characteristics:
- 18) Match computers to their characteristics:
- 19) Arrange the computers in chronological order of their creation:
- 20) Arrange the computers in chronological order of their creation:
- 21) The description of a type of microcomputer is down below: "This type of microcomputer is just like a Mobile Device, but bigger than Smartphone and smaller than Notebook Computer. Just like Totally Smartphone feature like Touch screen display, power full Battery Backup and we can calling and receiving call and click pictures and anything". Find out, what kind of microcomputer it is.
- 22) The term "information..." refers to the social, economic, technological, and cultural changes that have occurred as a result of the rapid development and extensive use of information and communication technologies
- 23) Speaking about the development of the information society in Russia, I. N. Kurnosov writes that "the strategy for the formation of the information society in the transition period to a new system of property relations ... take into account the special role and responsibility of the state"
- 24) The information society is established in those countries - ... - in which a post-industrial society was formed in the 60s and 70s
- 25) The network can serve as a means of ... propaganda materials of criminal organizations, recipes for the manufacture of explosives and poisonous substances, weapons, narcotic and psychotropic drugs, and methods for breaking electronic and other ciphers
- 26) One of the advantages of Russia is an advantageous geographical location between trade and information and telecommunication flows ...





- (27) It ... be noted that the problem of inequality in access to new information technologies is acute not only at the international level, but also at the micro level within each individual state
- (28) The term “developed post-industrial society” was introduced by ...
- (29) The largest number of internet users currently in ...
- (30) According to the ... criterion highlighted by W. Martin, the main characteristics of the information society are information technology, which is widely used in production, institutions, the education system and in everyday life
- (31) The total value of goods and services produced by a country in one year is ... (give the abbreviation)
- (32) Information ... must be viewed from two perspectives: as an independent industry, with its science, engineering, and manufacturing capabilities and as a basis for transformation of almost all areas of human activity
- (33) A system of consumption and production that is based on intellectual capital is ... economy
- (34) The unfair situation in society when some people have more opportunities, money, etc. than other people, is called ...
- (35) The “information economy” and “post-industrial society”, two concepts from that period, are still key parts of the information ... concept
- (36) The stage of society’s development when the service sector generates more wealth than the manufacturing sector of the economy is called ... society
- (37) A process of spreading the use of digital technology such as computers and the internet to do something is called ...
- (38) Match the main characteristics of the information society according to the following criteria by W. Martin:
- (39) Match the sentence with the time it was written:
- (40) Put the number of Internet users worldwide from the largest to the smallest:





- 41 According to the research company comScore Networks in 2019, the number of Internet users worldwide amounted to 747 million people. The United States has the largest audience of Internet users – 153.4 million people, that is, almost every second American regularly goes online. In second place is China – in China today 86.8 million Internet users. Russia still occupies 13th place in terms of the number of people connected to the Network – 12.7 million people. However, Africa with 800 million people accounts for only 1 % of the total number of its users in the world, with 90 % of them living in South Africa. Identify the type of information society problem in the above case study.
- 42 ... is the unfair situation in society when some people have more opportunities, money, etc. than other people
- 43 The last decade's technological advancements have played a ... part in the formation of modern society
- 44 The development of integrated circuits and storage devices has continued at an exponential rate; each subsequent halving of component size now takes ...
- 45 Nanoelectronics is the most ... breakthrough in technical development
- 46 The early transistors were not only larger than the smallest tubes, but they were also more ...
- 47 The transistor's most significant advantage over the best vacuum tubes was that it consumed far ...
- 48 The introduction of microelectronic circuits did not, for the most part, modify the ... of the basic functional units: transistors, resistors, capacitors, and other similar components were still used in microelectronic devices
- 49 Bell Telephone Laboratories' John Bardeen, Walter H. Brattain, and William Shockley devised the bipolar transistor in ...
- 50 ... integrated circuits are the name for the initial generations of commercially produced microelectronic devices (SSI)
- 51 The advent of ways for creating the numerous functional units on a crystal of semiconductor materials was critical to the development of ...
- 52 Charge carriers from both polarities are involved in the operation of ... transistors
- 53 The metal-oxide-semiconductor field-effect ..., which stands for MOSFET, is the most common in microelectronics
- 54 Prior to the transistor's discovery in 1947, the only way to execute its function in an electronic circuit was to use a ... tube





- 55 Bell Telephone Laboratories' John Bardeen, Walter H. Brattain, and William Shockley devised the ... transistor in 1948
- 56 "Molecular ..." is a term for data storage technologies that use molecular species as the data storage element, rather than e.g. circuits, magnetics, inorganic materials or physical shapes
- 57 Medium-scale integrated circuits have more than around 10 ... on a chip but fewer than approximately 200 (MSI)
- 58 Match the abbreviations and transcripts:
- 59 Match the parts of one sentence:
- 60 Match the parts of one sentence:
- 61 Match the highlighted words with their meaning in the sentence:
- 62 Arrange the stages in the history of transistors in chronological order:
- 63 Below is a description of one of the technologies: "It is a subfield of electronics. These devices are typically made from semiconductor materials. These include transistors, capacitors, inductors, resistors, diodes and (naturally) insulators and conductors. As a result, this kind of IT has the potential to lower skill requirements in some vocations while raising them in others. It has influenced our daily lives in a variety of ways, making our routines a little more pleasant". Which technology is described in the text?
- 64 A user cannot send direct instructions to the hardware ... various activities
- 65 Because of the expense, the system's productivity had to be increased ... cost effectiveness
- 66 The introduction of time-sharing systems, in particular, has long been regarded as a watershed moment in the evolution of ... systems
- 67 The ..., which was introduced in the mid-1950s, made computers more reliable
- 68 Microsoft Windows eventually surpassed Mac OS ... the world's most popular personal computer operating system, with over 90 % market share
- 69 ... created the first operating system for the IBM 701





- 70 ... was developed by Bell Labs and was the first significant operating system to be written almost entirely in high-level language
- 71 The Apple Macintosh, a low-cost workstation that emerged from early Alto computer concepts, was released in ...
- 72 The type of operating system that is not directly linked to the computer is the ... operating system
- 73 There are some of the potential benefits of distributed operating systems, for example ... (choose 2 correct answers)
- 74 Open the brackets, put the verb in the correct form in sentence: "There was no such thing when the first computers (develop) ... following WWII"
- 75 Open the brackets, put the verb in the correct form in sentence: "A more systematic structure (form) ... with the creation of ambitious operating systems in the mid-1960s"
- 76 Open the brackets, put the verb in the correct form in sentence: "Huge machines capable of conducting numerical calculations (construct) ... in the mid-1940s"
- 77 Open the brackets, put the verb in the correct form in sentence: "The transistor, which (introduce) ... in the mid-1950s, made computers more reliable"
- 78 Open the brackets, put the verb in the correct form in sentence: "The addition of support for Linux programs, which (reveal) ... in 2018, was a big advance"
- 79 Open the brackets, put the verb in the correct form in sentence: "A UNIX based operating system, Solaris (originally develop) ... by Sun Microsystems in the mid-'90s"
- 80 Open the brackets, put the verb in the correct form in sentence: "Wireless network connectivity (also manage) ... by mobile operating systems"
- 81 Open the brackets, put the verb in the correct form in sentence: "LibreOffice, Firefox, Thunderbird, Transmission, and lightweight games like Sudoku and chess (include) ... by default, while GNOME Files is the default file manager"
- 82 Match the names of operating systems with their descriptions:
- 83 Identify the sequence of generations of computers (by their description):





- 84 The description of the generation of computers is down below:
“Computers of this generation appeared, when IBM introduced the System/360, a line of software-compatible computers with varying levels of capability and price. Because the machines shared the same architecture and instruction set, programs created for one could be run on the other”. Which generation of computers is described in the text?
- 85 It is important to ensure that the ... data is accurate and relevant
- 86 Making information accessible is a challenge that frequently causes problems for ...
- 87 ... are important because they promote inter-service interoperability, meaning exchanging and making use of information, and interoperability between various component systems within the same service
- 88 Engineers still have problems ... with the use of standards, and quite often with their misuse and misunderstanding
- 89 Data administrators, as well as policymakers, must keep a balance between two ... aims
- 90 Nothing is more ... to a user than to try to use a new system that has turned functionality that previously was easy to use, into an obscure procedure that is difficult to use
- 91 ... is the person responsible for accomplishing all project objectives
- 92 The standard markup language for documents designed to be displayed in a web browser is ...
- 93 ... is a person who creates the high-level design of a technical system
- 94 ... is an organized collection of data stored and accessed electronically
- 95 Four different data groupings are possible based on the four different ...
- 96 Data ... is the process of combining data from multiple sources into a single system or in close proximity to one another, such as on a display, so that the user may access them from a single platform
- 97 ... is a difficulty that develops when a solution that works for a small data set fails to function for a much larger data set due to a combinatorial explosion, such as in comparands
- 98 It is necessary to establish information-sharing procedures that are basic and straightforward to use in order to ensure that ... is accessed





- 99) Duplication of effort, cost inefficiencies, lost business opportunities, medical catastrophes, and military disasters result from data access ...
- 100) Joint organizations use standards on multiple levels – international, ... and industry
- 101) The standard markup language for documents designed to be displayed in a web browser is called ... (give the abbreviation)
- 102) Establish a correspondence between data types and their description:
- 103) Match the notions with the situations that describe them:
- 104) Arrange the stages of the development of the internet in chronological order:
- 105) A participle is a verb form that can be used as an adjective, to create verb tense, or to create the passive voice. There are two types of participles: Present participle (ending -ing) and Past participle (usually ending -ed, -d, -t, -en, or -n). Find the passage, where there are both Participle 1 and Participle 2.
- 106) Real-time operating systems (RTOS) ... a special type of system software that is used to create and manage RTS
- 107) The time interval determines how often each of the active processes ... receive control under the given time slicing parameters
- 108) Inheritance ... that a thread that blocks a resource inherits the priority of the thread it blocks
- 109) Some of the RTOS are distributed all over the world, the number of installations reaches hundreds of thousands, which is not bad for industrial systems, while others are designed for a specific microcontroller model and the number of copies sold ... exceed two or three dozen
- 110) The disadvantage of the Self-Hosted RTOS is that most of the listed OS features are not used during the operation of an industrial computer and, therefore, ... computer resources in vain
- 111) QNX ... produced by QNX SoftWare Systems (USA) and is designed for high-critical applications that operate smoothly for years
- 112) The microkernel, process manager, device manager, file system manager, network manager belong to ...
- 113) RTOS are operating systems that are characterized by ... (choose 3 correct answers)





- 114 The interrupt latency is the time interval from ...
- 115 Limited ... resources are determined by the hardware features of the PC on which the RTS is operating
- 116 When a new driver is added to the system, no side effects can occur in the form of, for example, a conflict with other ...
- 117 ... is a bottleneck in most operating systems and usually creates significant problems for RTOS
- 118 The ... protocol is not based on any of the common network protocols such as IPX or NetBios and has a number of qualities that make it unique (give the abbreviation)
- 119 ... is a commercial Unix-like real-time operating system, aimed primarily at the embedded systems market, have been implemented in many hundreds of companies, including such well-known and large ones as Du Pont, Ferranti-Packard, General Motors, Kodak and others
- 120 ... by Microware System Corporation (USA) belongs to the class of UNIX-like systems and is a highly configurable high-performance real-time system
- 121 Match the systems and their characteristics:
- 122 Match the operating systems and their release dates:
- 123 Match the units of data measurement with their characteristics:
- 124 Match the operating systems and their characteristics:
- 125 Arrange the units of measurement of the data in ascending order:
- 126 A real-time operating system (RTOS) is an operating system (OS) for real-time applications that processes data and events that have critically defined time constraints Give a proper explanation of the predictability of RTOS.
- 127 ... was the first general purpose electronic computer
- 128 The analytical engine was invented in ...
- 129 ... invented a machine called the Tabulating machine
- 130 ... was used in the first generation of computers





- 131 In 1837, ... designed a general-purpose computing device, called the analytical engine
- 132 ... technology was used in the first generation of computers
- 133 Harvard Mark I is ...
- 134 Until the 1800s “computers” were ...
- 135 ... computer is a type of computers that harnesses the collective properties of quantum states, such as superposition, interference, and entanglement, to perform calculations
- 136 In 1936, Alan Turing invented a universal machine, which was later called the ...
- 137 ... is an electronic machine that can store, organize and find information, do processes with numbers and other data, and control other machines
- 138 ... is a set of electronic circuits on one small flat piece (or “chip”) of semiconductor material, usually silicon
- 139 International Business Machine’s first mass-produced electronic stored-program ... was IBM
- 140 In 1944 Howard Aiken developed ... I that could perform calculations involving large numbers
- 141 The first calculating device was ...
- 142 A mechanical calculator invented by Blaise Pascal in 1642 is called ...
- 143 Match computers to their creators:
- 144 Match the sentence with the time it was written:
- 145 Arrange the events chronologically:
- 146 Arrange the inventions chronologically:
- 147 According to the research company comScore Networks in 2019, the number of Internet users worldwide amounted to ... people
- 148 The second most important direction for strengthening accounting policies in the information society is the massive use of ...





- 149 According to the ... Institute, by 2055 unemployment will reach around 50 % of the total labor force (give or take 20 years depending on artificial intelligence growth)
- 150 According to Professor W. Martin, the information society is understood as a “developed ... society” that arose primarily in the West
- 151 technologies are one of the most basic through technologies in many documents and by many experts
- 152 The author of The Production and Distribution of Knowledge in the United States (1962) is ...
- 153 According to the ... criterion highlighted by W. Martin, information acts as an important stimulant for changing the quality of life, «information consciousness» is formed and affirmed with wide access to information
- 154 The unfair situation in society when some people have more opportunities, money, etc. than other people is called ...
- 155 The stage of society’s development when the service sector generates more wealth than the manufacturing sector of the economy is called ... society
- 156 ... is the branch of ethics that focuses on the relationship between the creation, organization, dissemination, and use of information, and the ethical standards and moral codes governing human conduct in society
- 157 Cell phones are ..., making it possible to provide everyone with communication channels
- 158 The term “...” refers to the social, economic, technological, and cultural changes that have occurred as a result of the rapid development and extensive use of information and communication technologies (ICTs) in modern countries, particularly since World War II
- 159 The most significant worldwide danger is the rise in labor ... when information technologies are implemented
- 160 Cell phones are digital, it was the transition to digital that made it possible to provide everyone with communication channels, but without ... in SIM cards, cellular communications could not become mass
- 161 W. Martin emphasizes the idea that ... is “a key element of the information society”
- 162 Match the approaches to understanding the information society and their authors:
- 163 Match the abbreviations and transcripts:





- 164 Match the people and the terms they put in use:
- 165 Put today's potential of automation in the USA according to McKinsey Global Institute from the lowest to the biggest:
- 166 Put the number of Internet users worldwide from the smallest to the largest:
- 167 The transistor's most significant advantage over the best vacuum tubes was that it consumed far ...
- 168 Talent, intellectual property, finance, and technical experience will always be in demand as the global economy is revolutionised by ... technology
- 169 According to current rates of growth in microelectronics, ... of the world's population will own a notebook-size computer with the capacity of today's huge computers in roughly a decade
- 170 For the past ... years, the design of computer processors has remained stable
- 171 Bell Telephone Laboratories' John Bardeen, Walter H. Brattain, and William Shockley devised the ... in 1948
- 172 Vacuum tubes were discovered to have a number of flaws, for example ... (choose 3 correct answers)
- 173 The transistor's most significant advantage over the best vacuum tubes was that it ...
- 174 Another name for bipolar transistors is ...
- 175 ... integration is giving way to very-large-scale integration (VLSI) and wafer-scale integration (WSI)
- 176 Demand for programmers is already outstripping supply, and some analysts believe that this shortfall will limit ... usage development in the next few years
- 177 A ... is a passive two-terminal electrical component that implements electrical resistance as a circuit element
- 178 ... extends a private network across a public network and enables users to send and receive data across shared or public networks (give the abbreviation)
- 179 A ... is a device that stores electrical energy in an electric field





- 180 The ... transistor was conceived about 25 years before bipolar transistors, but mass production did not become feasible until the early 1960s
- 181 Match the terms and definitions:
- 182 Match the terms and definitions:
- 183 Match the sentences and the missing word combinations in them:
- 184 Match the parts of the sentences:
- 185 Arrange the microelectronics in chronological order of their creation:
- 186 Arrange the microelectronics in chronological order of their creation:
- 187 The network operating system, which allows users to copy files from ...
- 188 Debian is a pre-compiled software that has over ... packages and is based on the Linux kernel
- 189 MULTICS was developed by ...
- 190 A magnetic tape is one that had to be ... attached
- 191 A piece of software that sits between the hardware and the user is an ... system
- 192 The Apple Macintosh, a low-cost workstation that emerged from early Alto computer concepts, was released in ...
- 193 The first operating system for the IBM 701 was created by ...
- 194 A ... operating system, often known as a multitasking OS, works by dedicating time to a certain activity and frequently switching between them
- 195 There are some of the potential advantages of real-time operating systems, for example ... (choose 2 correct answers)
- 196 There are some of the potential disadvantages of distributed operating systems, for example ... (choose 2 correct answers)
- 197 ... operating systems are the systems that run on a server and manage all the networking functions





- (198) ... is a Linux distribution that provides a free and open-source community-supported computing platform
- (199) ... is an open-source Linux distribution built on the architecture and infrastructure of Debian
- (200) In November 1985, Microsoft released ... – computer operating system
- (201) ... OS is an Android-based mobile operating system designed for Amazon's phones
- (202) Chrome OS is another Linux kernel-based operating system created by ...
- (203) Correlate the generations of computers with their descriptions:
- (204) Match the sentence to the tense in which it is written:
- (205) Arrange in chronological order the emergence of inventions:
- (206) Arrange the operating systems in descending order of popularity in 2022 (according to website StatCounter GlobalStats):
- (207) Transferred data might contain some important ...
- (208) If you have an old system, the running process will be too ... and inefficient
- (209) Information management is an important part of knowledge-oriented businesses in the ... century
- (210) The observations that apply to a common ... information system also apply to a certain extent to data warehouses and data mining
- (211) A roadblock to data availability such as connectivity means that ... (choose 2 correct answers)
- (212) ... is a person who identifies and analyzes business problems, and generates system requirements
- (213) Data ... is the process of combining data from multiple sources into a single system or in close proximity to one another, such as on a display, so that the user may access them from a single platform
- (214) ... is a technical person who builds new software systems
- (215) ... is the world's dominant software platform





- 216 ...business is the sale of goods and services to consumers, in contrast to wholesaling, which is sale to business or institutional customers
- 217 ... is something that needs great mental or physical effort in order to be done successfully and therefore tests a person's ability
- 218 ... is data that provides information about other data, but not the content of the data, such as the text of a message or the image itself
- 219 ... is the administration of an organization, whether it is a business, a non-profit organization, or a government body
- 220 ... is the property of a system to handle a growing amount of work by adding resources to the system
- 221 ... heterogeneity is when database schema or datasets for the same domain are developed by independent parties, resulting in differences in meaning and interpretation of data values
- 222 ... business is the sale of goods and services to consumers, in contrast to wholesaling, which is sale to business or institutional customers
- 223 Establish a correspondence between the abbreviation and the definition:
- 224 Establish a correspondence between the concept and the definition:
- 225 Identify the sequence of information management steps:
- 226 Arrange the stages of the development of the internet in chronological order:
- 227 The OS-9 family of real-time operating systems has been in use for over ... years, with more than 5 million installed copies
- 228 ... means compilers produce code that does not contain absolute addresses
- 229 ... AE has been ported to leading high-availability CompactPCI platforms such as the CPX8000 from Motorola Computer Group
- 230 ensure the uninterrupted operation of vital systems, therefore, if a failure occurs or some illegal operations are performed, the OS must diagnose them, if necessary, block the program or isolate applications from each other, initiate recovery and protection of other programs or the system itself
- 231 RTOS are operating systems that are characterized by ... (choose 3 correct answers)





- 232 Context switch time is the time interval from ...
- 233 The benefits of specialized RTOS include ... (choose 2 correct answers)
- 234 ... systems are computerized systems used in manufacturing to track and document the transformation of raw materials to finished goods
- 235 ... is a group of several proprietary graphical operating system families, all of which are developed and marketed by Microsoft
- 236 The interrupt ... is the time interval from an event on an object to the execution of the first instruction in the program for processing this event
- 237 ... time is the time interval from the moment a physical interrupt occurs to the start of execution of the first instruction of the user task to which the interrupt is intended
- 238 ... switch time is the time interval from the end of the execution of the last instruction of one process (thread) to the start of the execution of the first instruction of the next process (thread)
- 239 ... latency is the time interval from the end of the execution of the last user interrupt handler instruction to the execution of the first instruction of the process that entered the state due to this interrupt
- 240 ... memory is a memory management technique that provides an idealized abstraction of the storage resources that are actually available on a given machine which creates the illusion to users of a very large (main) memory
- 241 Match the units of data measurement with their characteristics:
- 242 Match the components of QNX with their characteristics:
- 243 Match the concepts with their characteristics:
- 244 Establish a correspondence between RTOS and their types:
- 245 Arrange the operating systems in chronological order of their release dates:
- 246 Arrange the states of tasks in typical RTOS designs in chronological order:
- 247 In the 1960s and 1970s, microcomputers and minicomputers became available to businesses and individuals. Thanks to what technology did it become possible?





- (248) The first recognized use of the word “computer” was from 1613. What did the “computer” use to mean before this word started to refer to devices?
- (249) Cryptography is the study of secure communications techniques that allow only the sender and intended recipient of a message to view its contents. What does a massive use of cryptography lead to?
- (250) An information society is a society where the usage, creation, distribution, manipulation and integration of information is a significant activity. Which of the following statements is not true about the Information Society?
- (251) Prior to the transistor’s discovery in 1947, the only way to execute amplification of a weak current in an electronic circuit was to use a vacuum tube. What were the initial advantages transistors demonstrated over small vacuum tubes?
- (252) Most businesses don’t want to deal with non-core tasks, which include the IT infrastructure. And if it has to pay for a data center, it has to function at maximum efficiency. Crisis situations are exacerbating resource shortages. Enterprises are cutting IT budgets, investing less in long-term projects in general and in data centers in particular. It is impossible to abandon IT altogether – it is equal to giving up doing business, but phased financing and speed of commissioning come to the fore. What do today’s IT managers face while having limited budgetary resources to expand data centers?
- (253) A company deals with tasks which take a long time to complete. Each worker has their duties that can be done offline. It’s essential for managers to estimate how long a task will take to be completed. The company uses a time-sharing system and all the users are able to finish their work in the system at the same time. However they noticed their gadgets to slow down fast. Also the workers notice the inconvenience while managing large workloads. What may be causing these problems? What decision should the company make?
- (254) A UNIX based operating system, was originally developed in the mid-’90s. Its major offerings include scalability, interoperability, data management and security, all of which are crucial for businesses that need high-end operating software. In addition to the above, it is also known for its web, database and Java-based services and its unlimited capacity for helping in managing file system and databases is a big plus as well. Which operating system is described:
- (255) Artificial intelligence is becoming more standardized, making it more accessible to a subject-matter expert who isn’t necessarily a knowledge engineering expert. What standards are becoming more common accessible and useful today?





- 256 Data access can be difficult due to many problems. Which of the following situations describes the documentation problem?
- 257 Martin Timmerman formulated the necessary requirements for an RTOS. Two of them are about priorities. Why the combination of priorities is necessary?
- 258 The OS-9 family of real-time operating systems has been in use for over 20 years, with more than 5 million installed copies. The range of OS-9 applications is wide – industrial automation, instrumental and measuring systems, military and space systems. Why has the OS-9 been so popular and widely used?
- 259 The slide rule in its basic form uses ... logarithmic scales to allow fast multiplication and division of numbers
- 260 Burroughs converted to electronic desk ... and in the mid to late 1970s their products dropped from the market
- 261 In 1936, Alan Turing invented a universal machine, which was later called ...
- 262 The first recognized use of the word “computer” was from ...
- 263 The explosion in world population and the rise of globalised trade demanded even faster and more flexible tools for processing ...
- 264 A general-purpose computing device called the analytical engine was developed in 1837 by ...
- 265 The ... is a small-scale special-purpose electronic digital machine for the solution of systems of linear algebraic equations and the first electronic computer incorporating vacuum tubes for digital computation
- 266 ... are made for program logic and for computer memory
- 267 Open the brackets, put the verb in the correct form in sentence: “The power of computers (double) ... roughly every 18 months to 2 years since the 1960s”
- 268 Open the brackets, put the verb in the correct form in sentence: “What will the computers of the future (look) ... like?”
- 269 Open the brackets, put the verb in the correct form in sentence: “Displays (attain) ... VGA resolution by 1988, and 256-color screens were available by 1993”
- 270 Open the brackets, put the verb in the correct form in sentence: “Resolutions and colors of computers (progress) ... quickly by 2022”





- (271) Open the brackets, put the verb in the correct form in sentence: “Years ago this service (can) ... be used to run algorithms and experiments, and explore tutorials and simulations around what might be possible with quantum computing”
- (272) Open the brackets, put the verb in the correct form in sentence: “Around the same period Intel (create) ... three microprocessor designs”
- (273) Open the brackets, put the verb in the correct form in sentence: “The microchip which (be) ... a key component in the development of the personal computer”
- (274) Open the brackets, put the verb in the correct form in sentence: “In 1944 Howard Aiken (develop) ... Mark I that could perform calculations involving large numbers”
- (275) Match machines to their characteristics:
- (276) Match computers to their characteristics:
- (277) Arrange the computers in chronological order of their creation:
- (278) Arrange the computers in chronological order of their creation:
- (279) The description of a type of microcomputer is down below: “This type of microcomputer is just like a Mobile Device, but bigger than Smartphone and smaller then Notebook Computer. Just like Totally Smartphone feature like Touch screen display, power full Battery Backup and we can calling and receiving call and click pictures and anything”. Find out, what kind of microcomputer it is.
- (280) The term “information...” refers to the social, economic, technological, and cultural changes that have occurred as a result of the rapid development and extensive use of information and communication technologies
- (281) Speaking about the development of the information society in Russia, I. N. Kurnosov writes that “the strategy for the formation of the information society in the transition period to a new system of property relations ... take into account the special role and responsibility of the state”
- (282) The information society is established in those countries – ... – in which a post-industrial society was formed in the 60s and 70s





- (283) The network can serve as a means of ... propaganda materials of criminal organizations, recipes for the manufacture of explosives and poisonous substances, weapons, narcotic and psychotropic drugs, and methods for breaking electronic and other ciphers
- (284) One of the advantages of Russia is an advantageous geographical location between trade and information and telecommunication flows ...
- (285) It ... be noted that the problem of inequality in access to new information technologies is acute not only at the international level, but also at the micro level within each individual state
- (286) The term “developed post-industrial society” was introduced by ...
- (287) The largest number of internet users currently in ...
- (288) According to the ... criterion highlighted by W. Martin, the main characteristics of the information society are information technology, which is widely used in production, institutions, the education system and in everyday life
- (289) The total value of goods and services produced by a country in one year is ... (give the abbreviation)
- (290) Information ... must be viewed from two perspectives: as an independent industry, with its science, engineering, and manufacturing capabilities and as a basis for transformation of almost all areas of human activity
- (291) A system of consumption and production that is based on intellectual capital is ... economy
- (292) The unfair situation in society when some people have more opportunities, money, etc. than other people, is called ...
- (293) The “information economy” and “post-industrial society”, two concepts from that period, are still key parts of the information ... concept
- (294) The stage of society’s development when the service sector generates more wealth than the manufacturing sector of the economy is called ... society
- (295) A process of spreading the use of digital technology such as computers and the internet to do something is called ...
- (296) Match the main characteristics of the information society according to the following criteria by W. Martin:
- (297) Match the sentence with the time it was written:





- (298) Put the number of Internet users worldwide from the largest to the smallest:
- (299) According to the research company comScore Networks in 2019, the number of Internet users worldwide amounted to 747 million people. The United States has the largest audience of Internet users – 153.4 million people, that is, almost every second American regularly goes online. In second place is China – in China today 86.8 million Internet users. Russia still occupies 13th place in terms of the number of people connected to the Network – 12.7 million people. However, Africa with 800 million people accounts for only 1 % of the total number of its users in the world, with 90 % of them living in South Africa. Identify the type of information society problem in the above case study.
- (300) The last decade's technological advancements have played a ... part in the formation of modern society
- (301) The development of integrated circuits and storage devices has continued at an exponential rate; each subsequent halving of component size now takes ...
- (302) Nanoelectronics is the most ... breakthrough in technical development
- (303) The early transistors were not only larger than the smallest tubes, but they were also more ...
- (304) The transistor's most significant advantage over the best vacuum tubes was that it consumed far ...
- (305) The introduction of microelectronic circuits did not, for the most part, modify the ... of the basic functional units: transistors, resistors, capacitors, and other similar components were still used in microelectronic devices
- (306) Bell Telephone Laboratories' John Bardeen, Walter H. Brattain, and William Shockley devised the bipolar transistor in ...
- (307) ... integrated circuits are the name for the initial generations of commercially produced microelectronic devices (SSI)
- (308) The advent of ways for creating the numerous functional units on a crystal of semiconductor materials was critical to the development of ...
- (309) Charge carriers from both polarities are involved in the operation of ... transistors
- (310) The metal-oxide-semiconductor field-effect ..., which stands for MOSFET, is the most common in microelectronics
- (311) Prior to the transistor's discovery in 1947, the only way to execute its function in an electronic circuit was to use a ... tube





- 312 Bell Telephone Laboratories' John Bardeen, Walter H. Brattain, and William Shockley devised the ... transistor in 1948
- 313 "Molecular ..." is a term for data storage technologies that use molecular species as the data storage element, rather than e.g. circuits, magnetics, inorganic materials or physical shapes
- 314 Medium-scale integrated circuits have more than around 10 ... on a chip but fewer than approximately 200 (MSI)
- 315 Match the abbreviations and transcripts:
- 316 Match the parts of one sentence:
- 317 Match the parts of one sentence:
- 318 Match the highlighted words with their meaning in the sentence:
- 319 Arrange the stages in the history of transistors in chronological order:
- 320 Below is a description of one of the technologies: "It is a subfield of electronics. These devices are typically made from semiconductor materials. These include transistors, capacitors, inductors, resistors, diodes and (naturally) insulators and conductors. As a result, this kind of IT has the potential to lower skill requirements in some vocations while raising them in others. It has influenced our daily lives in a variety of ways, making our routines a little more pleasant". Which technology is described in the text?

