Фонд

оценочных средств

по учебной дисциплине

Иностранный язык

по специальности СПО

11.02.16 Монтаж, техническое обслуживание и ремонт электронных приборов и устройств

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Фонд оценочных средств разработан на основе рабочей программы учебной дисциплины

Разработчики:

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СОДЕРЖАНИЕ

1 Паспорт Фонда оценочных средств

В результате освоения учебной дисциплины ОГСЭ.03 Иностранный язык в профессиональной деятельности обучающийся должен обладать предусмотренными ФГОС по специальности СПО 11.02.16 Монтаж, техническое обслуживание и ремонт электронных приборов и устройств следующими общими и профессиональными компетенциями:

ОК и ПК, актуализируемые при изучении дисциплины:

ОК 01. Выбирать способы решения задач профессиональной деятельности, применительно к различным контекстам.
ОК 02. Осуществлять поиск, анализ и интерпретацию информации, необходимой для выполнения задач профессиональной деятельности.
ОК 03. Планировать и реализовывать собственное профессиональное и личностное развитие.
ОК 04. Работать в коллективе и команде, эффективно взаимодействовать с коллегами, руководством, клиентами.
ОК 05. Осуществлять устную и письменную коммуникацию на государственном языке с учетом особенностей социального и культурного контекста.
ОК 06. Проявлять гражданско-патриотическую позицию, демонстрировать осознанное поведение на основе традиционных общечеловеческих ценностей.
ОК 07. Содействовать сохранению окружающей среды, ресурсосбережению, эффективно действовать в чрезвычайных ситуациях.
ОК 08. Использовать средства физической культуры для сохранения и укрепления здоровья в процессе профессиональной деятельности и поддержания необходимого уровня физической подготовленности.
ОК 09. Использовать информационные технологии в профессиональной деятельности.
ОК 10. Пользоваться профессиональной документацией на государственном и иностранном языках.
ОК 11. Планировать предпринимательскую деятельность в профессиональной сфере.

ПК 1.1. Осуществлять сборку, монтаж и демонтаж электронных приборов и устройств в соответствии с требованиями технической документации.
ПК 1.2. Выполнять настройку и регулировку электронных приборов и устройств средней сложности с учетом требований технических условий.
ПК 2.3. Выполнять техническое обслуживание электронных приборов и устройств в соответствии с регламентом и правилами эксплуатации.
ПК 3.2. Разрабатывать проектно-конструкторскую документацию печатных узлов электронных приборов и устройств и микросборок средней сложности.

Формой аттестации по учебной дисциплине является ***дифференцированный зачет*.**

2 Контроль и оценка освоения учебной дисциплины по темам (разделам)

Таблица 1

Элемент учебной дисциплины	Формы и методы контроля					
	Текущий контроль		Рубежный контроль		Промежуточная аттестация	
	Форма контроля	Проверяемые ОК, ПК	Форма контроля	Проверяемые ОК, ПК	Форма контроля	Проверяемые ОК, ПК
Раздел 1 **Вводный курс**			Контрольный срез знаний			
Тема 1 Теоретические основы перевода технической документации	Лексико-грамматические упражнения	ОК01,03,05,09 ПК1.1, 1.2,1.3	Контрольная работа № 1	ОК 01, 03, 05, 09 ПК 1.1, 1.2, 1.3	Дифференцированный зачет	ОК 01, 03, 05, 09 ПК 1.1, 1.2,1.3
Раздел 2 **Научно-технический прогресс**						
Тема 2.1 История научно-технических открытий	Лексико-грамматические упражнения	ОК01,02,03,04 ПК1.1, 1.2,1.3				
Тема 2.2 Математические действия, операции	Лексико-грамматические упражнения	ОК01,02,03,04, 05,09 ПК1.1, 1.2,1.3	Контрольная работа № 2	ОК 01, 03, 05, 09 ПК 1.1, 1.2,1.3	Дифференцированный зачет	ОК 01, 03, 05, 09 ПК 1.1, 1.2,1.3
Раздел 3 **Профессиональный модуль**						
Тема 3.1 Электроника и источники питания	Лексико-грамматические упражнения	ОК01,02,03,04, 05,09 ПК1.1, 1.2,1.3				
Тема 3.2 Элементы и узлы электронной аппаратуры	Лексико-грамматические упражнения	ОК01,02,03,04, 05,09 ПК1.1, 1.2, 2.3	Контрольная работа № 3	ОК 01,02,03,04,05,09 ПК 1.1, 1.2, 2.3	Дифференцированный зачет	ОК 01, 02, 03, 04, 05,09,10 ПК 1.1, 1.2, 2.3, 3.2
Тема 3.3 Монтаж и ремонт электронной техники	Лексико-грамматические упражнения	ОК01,02,03,04, 05,09 ПК1.1, 1.2, 2.3	Контрольная работа № 4	ОК 01,02,03,04,05,09 ПК 1.1,1.2,1.3		
Тема 3.4 Настройка, регулировка и тестирование электронных приборов и устройств	Лексико-грамматические упражнения	ОК01,02,03,04, 05,09 ПК1.1,1.2,1.3				
Тема 3.5 Мировые достижения науки и техники и тенденции в области электроники	Лексико-грамматические упражнения	ОК01,02,03,04, 05,09.10 ПК 1.1, 1.2, 2.3, 3.2	Контрольная работа № 5	ОК 01, 02, 03, 04, 05, 09,10 ПК 1.1, 1.2, 2.3, 3.2		

Тема 3.6 Перспективы развития электроники	Лексико-грамматические упражнения	ОК01,02,03,04, 05,09,10 ПК 1.1, 1.2, 2.3, 3.2	Контрольная работа № 6	*ОК 01, 02, 03, 04, 05,09,10* *ПК 1.1, 1.2, 2.3, 3.2*		
Тема 3.7 Профессии, связанные с эксплуатацией электронного оборудования	Лексико-грамматические упражнения	ОК01,02,03,04, 05,09,10 ПК 1.1, 1.2, 2.3, 3.2				

3 Задания для оценки освоения учебной дисциплины

Раздел 1 Основное содержание

Контрольный срез знаний

1 вариант

Задание 1. Поставьте следующие существительные в множественное число:

Lady, tragedy, cat, book, information, glasses, peach, boy, country, mouse, ox, sheep, dog, secretary, crowd, pencil, leaf, tomato, tooth, man, eye, sugar, money, lemon.

Задание 2. Раскройте скобки, употребляя глаголы в Present, Past или Future Simple:

1. I (to go) to bed at ten o'clock every day.
2. I (to go) to bed at ten o'clock yesterday.
3. I (to go) to bed at ten o'clock tomorrow.
4. She (to do) all the washing in their house.
5. He even (not to know) how to use the washing machine.
6. Two years ago they (to be) rich and money (to be) never a problem.
7. You (to think) you (to be) happy in your new neighborhood?
8. When the cabbage soup (to be) ready?

Задание 3. Поставьте каждое слово напротив той части речи, которой оно соответствует:

Noun	nice
Verb	and
Adjective	in
Adverb	apparently
Numeral	sixty-two
Pronoun	not
Conjunction	who
Preposition	textbook
Particle	sleep
Interjection	Oh

Ответ к № 3:	
существительное	textbook
глагол	sleep
прилагательное	nice
наречие	apparently
числительное	sixty-two
местоимение	who
союз	and
предлог	in
частица	not
междометие	Oh

Задание 4. Поставьте предложения в вопросительную и отрицательную формы.

1. He studies at the college.
2. He will visit us some day.
3. We usually watched TV in the evening.

Задание 5. Выберите правильный вариант ответа с конструкцией there is / there are

1. There ... many children in the park.

A. are

B. is

2. There ... many ways of solving such a problem.

A. is

B. are

3. There ... a man outside the building.
A. weren’t
B. wasn’t

4. How many children ... there in your class?
A. is
B. are

5. There ... much sugar left.
A. isn’t
B. aren’t

Ответы к №5:1-A 2-B 3-B 4-B 5-A

Задание 6. Выберите правильный вариант ответа, содержащий притяжательный падеж существительного:

1. I'm going to spend the night at my aunt house.
    A. my aunt' house
    B. my aunts' house
    C. my aunt's house
    D. my aunts house

2. These are children books.
    A. children's books
    B. children' books
    C. childrens books
    D. childrens' books

3. What's the name this street?
    A. the names' street
    B. the names street
    C. the name's street
    D. the name of this street

4. Your father has gone to the butcher.
    A. the butcher
    B. the butcher's
    C. the butchers
    D. the butcher'

5. This is the roof house.
    A. the roof house
    B. the roof of the house

C. the roof's house
D. the roof' house

Ответы к №6: 1-C 2-A 3-D 4-B 5-B

2 вариант

Задание 1. Поставьте следующие существительные в множественное число:

Day, bed, star, snow, bench, box, girl, fly, knife, wife, foot, child, deer, knowledge, hair, glass, library, dress, watch, tree, mountain, bush, goose, picture.

Задание 2. Раскройте скобки, употребляя глаголы в Present, Past или Future Simple:

1. You (to watch) TV every day?
2. You (to watch) TV yesterday?
3. You (to watch) TV tomorrow?
4. When you (to leave) home for school every day?
5. When you (to leave) home for school yesterday?
6. When you (to leave) home for school tomorrow?
7. My brother (to go) to work every day. He (to leave) home at a quarter past eight. The office where he (to work) is near our house, he (to walk) there. He (not to take) a bus. Yesterday he (not to go) to work. Yesterday he (to get) up at nine o'clock.
8. You (to have) a PT lesson yesterday? — No, I....

Задание 3. Поставьте каждое слово напротив той части речи, которой оно соответствует:

Noun	nice
Verb	and
Adjective	in
Adverb	apparently
Numeral	sixty-two
Pronoun	not
Conjunction	who
Preposition	textbook
Particle	sleep
Interjection	Oh

Ответы к № 3:	
существительное	textbook
глагол	sleep
прилагательное	nice
наречие	apparently
числительное	sixty-two
местоимение	who
союз	and
предлог	in
частица	not
междометие	Oh

Задание 4. Поставьте предложения в вопросительную и отрицательную формы:

1. Our teacher asks many questions.
2. Nick worked at school last year.
3. We shall go to Moscow in summer.

Задание 5. Выберите правильный вариант ответа с конструкцией there is / there are:

1. There ... many restaurants in my town.

A. Is
B. Are

2. I am sorry to tell you but there ... no good news for you today.

A. are
B. is

3. There ... nothing he could do to prevent the crime.

A. is
B. will be
C. are
D. was

4. You should go. There will ... something new to learn at the meeting.

A. is
B. are
C. to be
D. be

5. There ... soup in the fridge.

A. is many
B. are much
C. is much
D. are many

Ответ к № 5: 1-B 2-B 3-D 4-D 5-C

Задание 6. Выберите правильный вариант ответа, содержащий притяжательный падеж существительного:

1. Do you like Eliot poetry?
    A. Eliot' poetry
    B. Eliots poetry
    C. Eliot's poetry
    D. Eliots' poetry

2. It's about three hours work.
    hours work
    hours's work
    hour's work
    hours' work

3. That's the leg table.
   the leg of table
   the legs' table
   the leg of the table
   the leg's table

4. What are his brothers names?
   brothers of the names
   brothers' names
   brother' s names
   brothers's names

5. My daughter birthday is in May.
   my daughter's birthday
   my daughter' birthday
   my daughters birthday
   my daughters' birthday

   Ответы к № 6: 1-C 2-D 3-C 4-B 5-A

3 вариант

Задание 1. Поставьте следующие существительные в множественное число:

Secretary, crowd, pencil, leaf, tomato, tooth, man, eye, sugar, money, lemon, day, bed, star, snow, bench, box, girl, fly, knife, foot, child, deer, knowledge, hair, glass.

Задание 2. Раскройте скобки, употребляя глаголы в Present, Past или Future Simple:

1. You (to watch) TV yesterday?
2. You (to watch) TV tomorrow?
3. When you (to leave) home for school every day?
4. She (to do) all the washing in their house.
5. He even (not to know) how to use the washing machine.
6. Two years ago they (to be) rich and money (to be) never a problem.
7. You (to think) you (to be) happy in your new neighborhood?
8. When the cabbage soup (to be) ready?

Задание 3. Поставьте каждое слово напротив той части речи, которой оно соответствует:

Conjunction	nice
Verb	and
Particle	in
Adjective	apparently
Adverb	sixty-two
Preposition	not

Ответ к № 3:	
союз	and
глагол	sleep
частица	not
прилагательное	nice
наречие	apparently

Interjection	who
Noun	textbook
Numeral	sleep
Pronoun	Oh

предлог	in
междометие	Oh
существительное	textbook
числительное	sixty-two
местоимение	who

Задание 4. Поставьте предложения в вопросительную и отрицательную формы:

1. My sister finished her work.
2. They study English.
3. They will go to Moscow.

Задание 5. Выберите правильный вариант ответа с конструкцией there is / there are:

1. ... there ... here?
A. Is / somebody
B. Is / anybody
C. Are / somebody
D. Are / anybody

2. There ... a lot of people at yesterday's meeting.
A. are
B. is
C. was
D. were

3. There ... much food left in the fridge. We should buy some.
A. isn't
B. aren't
C. are
D. is

4. Jim, come here! There ... I need to talk to you.
A. is anything
B. are something
C. is something
D. are anything

5. You didn't understand me right. I am sure there ... some misunderstanding.
A. be
B. must have been
C. will be
D. are

Ответ к № 5: 1-B 2-D 3-A 4-C 5-B

Задание 6. Выберите правильный вариант ответа, содержащий притяжательный падеж существительного:

1. I'm going to spend the night at my aunt house.
   A. my aunt' house
   B. my aunts' house
   C. my aunt's house
   D. my aunts house

2. What's the name this street?
   A. the names' street
   B. the names street
   C. the name's street
   D. the name of this street

3. This is the roof house.
   A. the roof house
   B. the roof of the house
   C. the roof's house
   D. the roof' house

4. It's about three hours work.
   A. hours work
   B. hours's work
   C. hour's work
   D. hours' work

5. What are his brothers names?
   A. brothers of the names
   B. brothers' names
   C. brother' s names
   D. brothers's names

Ответ к № 6: 1-C 2-D 3-B 4-D 5-B

Тема 1 Теоретические основы перевода технической документации

Лексико-грамматические упражнения

Смекаев В. П. Современный технический перевод. Учебное пособие. Английский язык. — М.: Валент, 2014. — 360 с.

Раздел 2
Научно-технический прогресс

Тема 2.1 История научно-технических открытий

Лексико-грамматические упражнения

1. *Read and translate the text*

WHO INVENTED THERMOMETER?

The thermometer was invented by Galileo Galilei in 1593. His thermometer consisted of water in a glass bulb. The water moved up and down the bulb as the temperature changed. The sealed thermometer was invented in 1641 by the Grand Duke Ferdinand II. He used a glass tube containing alcohol, which freezes well below the freezing point of water (alcohol freezes at — 175° F=-115°C). He sealed the tube to exclude the influence of air pressure. Mercury was later substituted for the alcohol, and then Daniel Gabriel Fahrenheit (1686-1736), a German physicist, used mercury plus a chemical solution that kept the mercury from sticking to the tube of the thermometer (in 1714). Fahrenheit also expanded the thermometer's scale (in 1724). On Fahrenheit scale, the temperature of boiling water is 212°F and the freezing point of water is 32°F. Anders Celsius, a Swedish astronomer, invented the Celsius (or Centigrade) scale in 1742, putting the freezing point of water at 0°C and the boiling point at 100°C.

2. *Answer the questions*

1) What was invented by Galileo Galilei in 1593?
2) What did his thermometer consist of?
3) How did the water move in the bulb with the changing of the temperature?
4) Who invented the sealed thermometer?
5) What was the principle of operation of a sealed thermometer?
6) What changes did Mercury and Daniel Gabriel Fahrenheit do in the thermometer?
7) What was the principle of operation of the Celsius scale, invented by Anders Celsius, a Swedish astronomer?

Тема 2.2 Математические действия, операции

Лексико-грамматические упражнения

1. Match the sums with the numbers.(Соедините примеры с ответами)

1) 45: 5 2) 9·6

3) 29-12 4) 73+12

a) eighty-five b) fifty-four

c) nine d) seventeen

1 __ 2 __ 3 __ 4 __

2. Read a story and count.(Прочитайте рассказ и посчитайте)

In the street I live there are two hotels. In each hotel there are five floors. On each floor there are ten rooms. In each room there is a bathroom. In each bathroom there are two bars of soap. Then one day a thief steals half the soap bars. How many bars of soap are left in the room?

Контрольная работа № 2
Дифференцированный зачет

Вариант 1

Задание 1. Переведите часть текста письменно.

A computer is a machine with an intricate network of electronic circuits that operate switches or magnetize tiny metal cores. The switches, like the cores, are capable of being in one of two possible states, that is on or off; magnetized or demagnetized. The machine is capable of storing and manipulating numbers, letters, and characters (symbols).

The basic idea of a computer is that we can make the machine do what we want by inputting signals that turn certain switches on and turn other off, or magnetize or don't magnetize the cores.

Задание 2. Составьте пары или группы близких по значению слов из перечня.

To turn on, to provide, to type, to accept, to help, to learn, to observe, to call, to tell, to keep, to feed, to solve, to relate, to switch off, to communicate, to receive, to supply, to switch on, to assist, to print, to study, to input, to turn off, to decide, to store, to say, to name, to watch.

Задание 3. Назовите три формы следующих неправильных глаголов:

To be, to have, to mean, to learn, to become, to bring, to know, to think, to buy, to take.

Задание 4. Найдите эквиваленты.

1. Intricate	A. Сложение
2. Electronic circuit	B. Сложный, запутанный
3. To operate switches	C. Обрабатывать данные
4. To store numbers	D. Приводить в действие переключатели
5. To manipulate	E. Включать
6. To switch on	F. Снабжать, обеспечивать
7. To turn off	G. Управлять
8. To process data	H. Запоминать числа
9. To supply	I. Выключать
10. addition	J. Электронная схема

Вариант 2

Задание 1. Переведите часть текста письменно.

The basic job of computers is processing of information. For this reason computers can be defined as devices which accept information in the form of instructions, called a program, and characters, called data, perform mathematical and/ or logical operations on the information, and then supply the results of these operations. The program, or part of it, which tells the computer what to do and the data, which provide the information needed to solve the problem, are kept inside the computer in a place called memory.

It is considered that computers have many remarkable powers. However most computers, whether large or small, have three basic capabilities.

Задание 2. Составьте пары или группы близких по значению слов из перечня.

Work, machine, fundamentals, display, application, capabilities, job, storage, screen, state, basics, use, concept, specialist, journal, character, memory, idea, expert, magazine, position, symbol, command, data, solution, device, instruction, powers, information, decision.

Задание 3. Назовите три формы следующих неправильных глаголов:

To do, to begin, to give, to make, to keep, to get, to read, to show, to be, to have.

Задание 4. Найдите эквиваленты.

1. addition	A. умножение
2. subtraction	B. немедленно
3. division	C. устройство ввода
4. multiplication	D. сложение
5. exponentiation	E. запоминающее устройство на магнитной ленте
6. user	F. пользователь
7. input device	G. вычитание
8. disc drive	H. дисковод
9. tape drive	I. возведение в степень
10. instantaneously	J. деление

Раздел 3

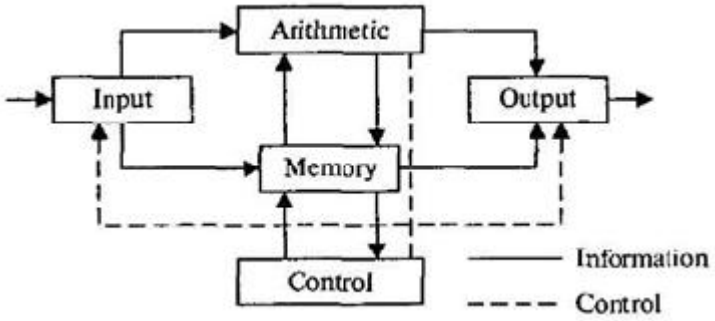
Профессиональный модуль

Тема 3.1 Электроника и источники питания

Лексико-грамматические упражнения

1. Translate the five major functional units of a digital computer:

1) Input— to insert outside information into the machine; 2) Storage or memory — to store information and make it available at the appropriate time; 3) Arithmetic-logical unit — to perform the calculations; 4) Output — to remove data from the machine to the outside world and 5) Control unit — to cause all parts of a computer to act as a team.



2. Вспомните значение новых слов и попытайтесь перевести словосочетания, употребляемые с этими словами:

Computer, analog computer; digital computer; hybrid computer; all-purpose computer; general-purpose computer; fifth-generation computer; game computer; handheld computer; mobile computer; multimedia computer; notebook computer; pocket computer; portable computer.

Unit: unit of memory; unit of data; unit of measurement; arithmetic unit; arithmetic-logical unit; central processing unit; computing unit; control unit; functional unit; input unit; output unit; network unit; system unit.

Function: arithmetic function; checking function; complex function; computer function; continuous function; conversion function; distribution function; encoding function; logical function; numeric function; output function; program function; search function; software function; support function; utility function; variable function.

Control: access control; batch control; coding control; distance / remote control; error control; execution control; hardware control; input/output control; memory control; power control; production control; program control; rate control; self-acting control; software control; system control.

Тема 3.2 Элементы и узлы электронной аппаратуры

Лексико-грамматические упражнения

1. ***Найдите английские эквиваленты следующих словосочетаний:***

Функциональная организация; действия компьютера; связывать друг с другом; вводить информацию извне; делать информацию доступной; выполнять вычисления; выводить информацию; блок управления; выдавать команды; заставлять выполнять команды; выходное устройство; внешний мир; связываться друг с другом; комбинация электрических импульсов; холостой импульс; импульсы, распознаваемые компьютером.

2. ***Вспомните значение следующих прилагательных и преобразуйте их в сравнительную и превосходную степени.***

A. Small; fast; new; long; late; wide; young; easy; great; dull; rich; bulky; large; vast; early; old; broad.
B. Frequent; reliable; approximate; significant; intricate; possible; basic; remarkable; common; modern; dependent; general; necessary; successful; scientific; universal.
C. Good; bad; little; many.

Контрольная работа № 3

Вариант 1

1. ***Прочтите и письменно переведите первые три абзаца текста.***

SOME FEATURES OF A DIGITAL COMPUTER

It should be noticed that even in a large-scale digital system, such as in a computer, or in a data-processing, control or digital-communication system, there are only a few basic operations which must be performed. These operations may be operated many times. The four circuits most commonly employed in such systems are known as the OR, AND, NOT and FLIP-FLOP. They are called logic gates or circuits.

An electronic digital computer is a system which processes and stores very large amount of data and which solves scientific problems of numerical computations of such complexity and with such speed that solution by human calculation is not feasible. So the computer as a system can perform numerical computations and follow instructions with extreme speed but it cannot program itself.

We know that the numbers and the instructions which form the program, the computer is to follow, are stored in an essential part of the computer called the memory. The second

important unit of the computer is the control whose function is to interpret orders. The control must convert the command into an appropriate set of voltages to operate switches and carry out the instructions conveyed by the order. The third basic element of a computer is the arithmetic device, which contains the circuits performing the arithmetic computations: addition, subtraction, etc. The control and arithmetic components are called the central processor. Finally a computer requires appropriate input-output devices for inserting numbers and orders into the memory and for reading the final result.

Suppose a command to perform an addition or division has been transmitted to the central processor. In response to this order the control must select the correct operands from the memory, transmit them to the arithmetic unit and return to the memory the result of the computation. The memory serves for storing not only the original input data, but also the partial results which will have to be used again as the computation proceeds.

Lastly, if the computation doesn't stop with the execution of this instruction and the storage of the partial result, the control unit must automatically pass on to the next instruction. The connection of the control unit back to the input permits insertion of more data when there is room in the memory.

2. Просмотрите текст еще раз. Ответьте на вопросы, используя информацию текста.

1. What are the most commonly used circuits in any computer? 2. How are they called? 3. What kind of a system is a digital computer? 4. Is there anything that a computer cannot do itself? What is it? 5. Where are the instructions and digits stored? 6. What is the function of the control? 7. What does the arithmetic device serve for? 8. What components form the central processor? 9. What other devices in addition to the above-mentioned ones does a computer require? 10. How are computations performed in a computer?

3. Найдите в тексте английские эквиваленты следующих сочетаний:

Крупномасштабная цифровая система; система обработки данных; система цифровой связи; наиболее широко распространенные схемы; логические схемы; решать научные проблемы; выполнять числовые вычисления; интерпретировать команды.

Вариант 2

1. Прочтите и письменно переведите последние три абзаца текста.

SOME FEATURES OF A DIGITAL COMPUTER

It should be noticed that even in a large-scale digital system, such as in a computer, or in a data-processing, control or digital-communication system, there are only a few basic operations which must be performed. These operations may be operated many times. The four circuits most commonly employed in such systems are known as the OR, AND, NOT and FLIP-FLOP. They are called logic gates or circuits.

An electronic digital computer is a system which processes and stores very large amount of data and which solves scientific problems of numerical computations of such complexity and with such speed that solution by human calculation is not feasible. So the computer as a system can perform numerical computations and follow instructions with extreme speed but it cannot program itself.

We know that the numbers and the instructions which form the program, the computer is to follow, are stored in an essential part of the computer called the memory. The second important unit of the computer is the control whose function is to interpret orders. The control must convert the command into an appropriate set of voltages to operate switches and carry out the instructions conveyed by the order. The third basic element of a computer is the arithmetic device, which contains the circuits performing the arithmetic computations: addition, subtraction, etc. The control and arithmetic components are called the central processor. Finally a computer requires appropriate input-output devices for inserting numbers and orders into the memory and for reading the final result.

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Lastly, if the computation doesn't stop with the execution of this instruction and the storage of the partial result, the control unit must automatically pass on to the next instruction. The connection of the control unit back to the input permits insertion of more data when there is room in the memory.

2. Просмотрите текст еще раз. Ответьте на вопросы, используя информацию текста.

1. What are the most commonly used circuits in any computer? 2. How are they called? 3. What kind of a system is a digital computer? 4. Is there anything that a computer cannot do itself? What is it? 5. Where are the instructions and digits stored? 6. What is the function of the control? 7. What does the arithmetic device serve for? 8. What components form the central processor? 9. What other devices in addition to the above-mentioned ones does a computer require? 10. How are computations performed in a computer?

3. Найдите в тексте английские эквиваленты следующих сочетаний:

Приводить в действие переключатели; выполнять команды; нуждаться (требовать) в необходимом устройстве ввода-вывода; введение чисел и команд; считывание конечных результатов; передавать команду в центральный процессор; в ответ на; хранение частичных результатов; позволить введение новых данных; свободное место в памяти.

Тема 3.3 Монтаж и ремонт электронной техники

Лексико-грамматические упражнения

1. Найдите английские эквиваленты следующих словосочетаний:

Функциональный блок; цифровой компьютер; устройство ввода; устройство управления; арифметико-логическое устройство; центральный процессор; структура компьютерной системы; первичное запоминающее устройство; вторичное ЗУ; рассмотрение; поэтому последовательность; оперативное ЗУ; внутренняя память; промежуточные результаты; подобие функции человеческого мозга; размешать содержимое по требованию; система счисления; двоичная система счисления; возможные величины; объем информации; двоичный код; смежные ячейки памяти; последовательность символов; быстродействующее устройство; полупроводник; доступный.

2. Вспомните значение новых слов и попытайтесь перевести словосочетания, употребляемые с этими словами.

Storage: available storage; buffer storage; computer storage; data storage; magnetic disk storage; magnetic tape storage; input storage; intermediate storage; internal storage; laser storage; main storage; primary storage; secondary storage; sequential-access storage; variable storage; virtual storage.

Value: absolute value; acceptable value; additional value; binary value; byte value; character value; constant value; correct value; data value; digit value; discrete values; invalid value; negative value; numerical value; output value; valid value.

Digit: binary digit; binary-coded digit; check digit; informaion digit; input digit; nonsignificant digit; significant digit; digit-by-digit.

Sequence: out of sequence; alphabetic sequence; arithmetic sequence; binary sequence; character sequence; code sequence; instruction sequence; data sequence; digital sequence; historical sequence; increasing sequence; program sequence; string sequence.

Тема 3.4 Настройка, регулировка и тестирование электронных приборов и устройств

Лексико-грамматические упражнения

Переведите предложения, содержащие Perfect Participle Active и Perfect Participle Passive.

1. Having finished the research the scientists made the analysis of the data obtained. 2. The designer left the office having looked through all the documents. 3. Having discussed the func¬tions of storage units we passed on to the consideration of control processing unit. 4. Having limited the information capacity of a single bit to two alternatives the computer designers expressed data by a combination of bits. 5. Having translated the program into machine language the computer architect put the program into the machine. 6. Having been coded the instruction was transmitted to the central processing unit. 7. Having been transmitted to the central processing unit the instruction made arithmetic-logical unit perform some computations. 8. Having been regulated by the operator the equipment operated well. 9. Data having been entered correctly into the computer component of a data processing system, the need for further manipulation by humans is eliminated. 10. Having been well prepared for the examination the pupils could answer all the questions the teacher asked them.

Контрольная работа № 4

1. Подберите вместо пропусков подходящие по смыслу слова.

1. The method of … all functional categories to one another represents the functional organization of a computer,

a) showing; b) relating; c) performing

2. Instructions and data are fed through the equipment to the … .

a) output; b) memory; c) input; d) control

3. The main units of the computer communicate with each other … a machine language.

a) in spite of; b) because of; c) by means of

4. The input also … the information into the pulse — no-pulse combinations understandable to the computer.

a) converts; b) removes; c) accomplishes

5. The four … are used to perform basic operations in a computer.

a) basics; b) circuits; c) equipment

6. A computer can solve very complex numerical … .

a) communication; b) computations; c) instructions

7. Numbers and instructions forming the program are … in the memory.

a) solved; b) stored; c) simulated

8. The control unit serves for … orders.

a) reading; b) interpreting; c) inputting

9. The function of memory is to store … the original input data the partial results.

a) not only ... but also; b) either ... or; c) no sooner ... than

10. The … includes the control and arithmetic-logical units.

a) flip-flop; b) digital computer; c) central processor

2. Заполните пропуски, выбрав правильную грамматическую форму.

1. The simplest digital device is any device which [a) can; b) could; c) must] count.

2. In ancient days man [a) learns; b) learned; c) has learned] to substitute beads for fingers to help him count.

3. The ancient Chinese simplified the [a) counted; b) to count; c) counting] board into abacus.

4. The Japanese improved the abacus making it [a)more efficient; b)much efficient;
c) efficienter].

5. The tremendous speeds of computers and the flexibility [a) building; b) built; c) to build] into them [a) because of; b) according to; c) due to] the logical control make modern computers more powerful than mechanical calculators.

6. The big problem in understanding digital computers is the logic which relates the logical elements into a unit [a) performed; b) performing; c) having performed] arithmetic and logical operations.

7. Arithmetic operations [a) converted; b) are converted;
c) was converted] into a sequence of simple logical operations.

8. Any digital calculation is usually [a) breaking; b) broken; c) being broken] down into a sequence of elementary operations.

9. A computer is a device [a) to accept; b) has accepted; c) accepts] a set of instructions and [a) executes; b) executed; c) to execute] them in the appropriate sequence.

lO. The flip-flop [a) is; b) was; c) has been] a storage cell with two inputs and two outputs.

Тема 3.5 Мировые достижения науки и техники и тенденции в области электроники

Лексико-грамматические упражнения

Прочтите, переведите и запомните следующие выражения:

An information-dependent society; a computer-literate citizen; an everyday problem-solving device; to be aware; to influence the quality of life; to have an opportunity; to learn the basics; to learn computing; the most significant technical achievements; to embrace computer literacy; to prepare programs; to direct the operations of a computer; to be on the way of becoming computer-literate; to process information; to have much in common; a data processing system.

Контрольная работа № 5

Тема 3.6 Перспективы развития электроники

Лексико-грамматические упражнения

Read and write down the main directions of technological modernization of the radio-electronic industry:

1. Creation of a research and production complex with a sufficient set of technologies for the production of modern radio-electronic products.
2. Optimization of organizational, scientific, technical and industrial cooperation between enterprises for wider use of a single technological base.
3. Expanded use of innovative radio-electronic technologies through their creation, implementation, borrowing and evolutionary development.
4. Elimination of ineffective, unused and unreasonably duplicated production and technological resources.
5. Active development and production of innovative high-tech products with the priority of the civil sector.
6. Increase overall labor productivity and speed up design and production cycle of development.
7. Preservation and development of human resources.

Контрольная работа № 6

1. Подберите вместо пропусков подходящее по смыслу слово.

1. The most common _____ for planning the program logic are flowcharting and pseudocode.

a) technologies; b) technics; c) techniques

2._____was designed for dealing with the complicated mathematical calculations of scientists and engineers, a) COBOL; b) FORTRAN; c) PL/I

3._____is the foundation of any programming languages.

a) a set of rules; b) a group of numbers; c) a lot of instructions

4. I / O_____match the physical and electrical characteristics of input-output devices.

a) interchanges; b) interfaces; c) interpretations

5. Letter-quality, dot-matrix and ink-jet printers are all _____ printers.

a) line; b) page; c) character

6. The most common device used to transfer information from the user to the computer is the _____ .

a) keyboard; b) printer; c) modem

7. Input-output units link the computer to its external _____.

a) requirement; b) development; c) environment

8. I / O devices can be classified according to their speed, visual displays being _____devices.

a) high-speed; b)medium-speed; c) low-speed

2. Согласуйте слова в левой колонке с их интерпретацией, предложенной справа.

1. Computer	a) an electronic device accepting data processing results from the computer system;
2. Input	b) the unit performing arithmetic opera- tions called for in the instructions;

Output	c) the unit coordinating all the activities of various components of the computer. It reads information, enterpretes instructions, performs operations, etc.;
4. Software	d) a set of programs designed to control the operation of a computer;
5. Hardware	e) lists of instructions followed by the control unit of the CPU:
6. Storage	f) an electronic device keying information into the computer;
7. CPU	g) the unit holding all data to be processed, intermediate and final results of processing;
8. CU	h) visible units, physical components of a data processing system;
9. ALU	i) the unit that directs the sequence of system operations, selects instructions and interpretes them;
10. Program	j) a device with a complex network of electronic circuits that can process information, make decisions, and replace people in routine tasks.

3. Определите неличные формы глагола, содержащиеся в следующих предложениях. Переведите их.

1. The problems to be studied are of great importance. 2. The problem studied helped us understand many things. 3. To study the problem we must make some experiments. 4. To study the problem means to give answers to many questions. 5. Having studied the problem we could answer many questions. 6. The problem studied is unlikely to be of great interest. 7. Scientists studying the problem made a lot of experiments to get answers to the required questions. 8. The problem to have been studied last year will not help us to solve our task now. 9. Having been well prepared for the examination the pupils could answer all the questions the teacher asked them. 10. The problem to be discussed at the meeting requires careful consideration.

Тема 3.7 Профессии, связанные с эксплуатацией электронного оборудования

Лексико-грамматические упражнения

Переведите слова и словосочетания на английский язык:

Электрик, Электромонтер, Электрослесарь, Электротехник

Что должен знать специалист?

- *Физику.*
- *Математику (арифметику, геометрию, тригонометрию).*
- *Правила техники безопасности.*
- *Технические параметры, устройство, принципы действия обслуживаемых датчиков, приборов, систем.*
- *Виды и причины их повреждений.*
- *Методы обнаружения неисправностей и правила ремонта.*
- *Правила технической эксплуатации оборудования*

Задания к зачету по дисциплине

1. Выполните перевод грамматикализованных предложений.

I. I. Accuracy is one of the major items in judging a control system. The higher the accuracy of the system, the less errors the system makes. 2. The digital computer employs the principle of counting units, digits, and hence, if properly guided, gives answers which have a high degree of accuracy. 3. Electronic computers can choose which of several different operations are the right ones to make in given circumstances. Never before has mankind had such a powerful tool available. 4. In many cases man has proved to be but an imperfect controller of the machines he has created. Thus, it is natural, that wherever necessary, we should try to replace the human controller by some form of automatic controller. 5. It is necessary to draw a distinction between calculating machines and computers, the former requiring manual control for each arithmetic step and the latter having the power to solve a complete problem automatically.

II. 1. Many servomechanisms and regulators are known to be composed of a number of control elements connected in series, the output of one being used as the input to the next. 2. to be expect a computer to work for at least several hours without a fault; that is to say, supposing a speed of one thousand operations per second, to perform more than ten million operations. 3. Digital programming implies the preparation of a problem for a digital computer by putting it in a form which the computer can understand and then entering this program into the computer storage unit. A problem to be solved by a digital computer must be expressed in mathematical terms that the computer can work with. 4. Among all forms of magnetic storage, magnetic tapes were the first to be proposed in connection with digital computers. 5. Programming a computer involves analyzing the problem to be solved and a plan to solve it.

2. Прочтите тексты (по вариантам) и составьте короткую аннотацию на каждый из них.

1. The WORLD-WIDE WEB

People have dreamt of a universal information database since late nineteen forties. In this database, not only would the data be accessible to people around the world, but it would also easily link to other pieces of information, so that only the most important data would be quickly found by a user. Only recently the new technologies have made such systems possible. The most popular system currently in use is the World-Wide Web (WWW) which began in March 1989. The Web is an Internet-based computer network that allows users on one computer to access information stored on another through the world-wide network.

As the popularity of the Internet increases, people become more aware of its colossal potential. The World-Wide Web is a product of the continuous search for innovative ways of sharing information resources. The WWW project is based on the principle of universal readership; "if information is available, then any person should be able to access it from anywhere in the world." The Web's implementation follows a standard client-server model. In this model, a user relies on a program (the client) to connect to a remote machine (the server), where the data is stored. The architecture of the WWW is the one of clients, such as Netscape, Mosaic, or Lynx,

"which know how to present data but not what its origin is, and servers, which know how to extract data", but are ignorant of how it will be presented to the user.

One of the main features of the WWW documents is their hypertext structure. On a graphic terminal, for instance, a particular reference can be represented by underlined text, or an icon. "The user clicks on it with the mouse, and the referenced document appears." This method makes copying of information unnecessary: data needs only to be stored once, and all referenced to it can be linked to the original document.

2. SUCCESS of the WWW

Set off in 1989, the WWW quickly gained great popularity among Internet users. What is the reason for the immense success of the Wbrld-Wide Wfeb? Perhaps, it can be explained by CERN's* attitude towards the development of the project. As soon as the basic outline of the WWW was complete, CERN made the source code for its software publicly available. CERN has been encouraging collaboration by academic and commercial parties since the onset of the project, and by doing so it got millions of people involved in the growth of the Wfeb.

The system requirements for running a WWW server are minimal, so even administrators with limited funds had a chance to become information providers. Because of the intuitive nature of hypertext, many inexperienced computer users were able to connect to the network. Furthermore, the simplicity of the Hyper Text Markup Language, used for creating interactive documents, allowed these users to contribute to the expanding database of documents on the Web. Also, the nature of the World-Wide Web provided a way to interconnect computers running different operating systems, and display information created in a variety of existing media formats.

In short, the possibilities for hypertext in the world-wide environment are endless. With the computer industry growing at today's pace, no one knows what awaits us in the 21st century.

3. A BRIEF HISTORY of the INTERNET

In 1973 the Defense Advanced Research Projects Agency (DARPA) initiated a research program to investigate techniques and technologies for interlinking packet networks of various kinds. The objective was to develop communication protocols which would allow networked computers to communicate transparently across multiple, linked packet networks. This was called the Internetting project and the system of networks which emerged from the research was known as the "Internet" (Intercontinental Network).

During the course of its evolution, particularly after 1989, the Internet system began to intergrate support for other protocol suites into its basic networking fabric. By the end of 1991 the Internet has grown to include some 5000 networks in over three dozen countries, serving over 700,000 host computers used by over 4,000,000 people.

The bulk of the system today is made up of private networking facilities In education and research institutions, business and in government organizations across the globe.

A secretariat has been created to manage the day-to-day function of the Internet Activities Board (IAB) and Internet Engineering Task Force (IETF). IETF meets three times a year in plenary and in approximately 50 working groups convene at intermediate times by electronic mail, teleconferencing and at face-to-face meetings.

There are a number of Network Information Centres (NICs) located throughout the Internet to serve its users with documentation, guidance, advice and assistance. As the Internet continues to grow internationally, the need for high quality NIC functions increases. Although the initial community of users of the Internet were drawn from the ranks of computer science and engineering its users now comprise a wide range of disciplines in the sciences, arts, letters, business, military and government administration.

Лист согласования

Дополнения и изменения к ФОС на учебный год

Дополнения и изменения к ФОС на _____ учебный год по дисциплине _____

В ФОС внесены следующие изменения:

_____
_____
_____
_____
_____

Дополнения и изменения в ФОС обсуждены на заседании МЦК _____
«_____» _____ 20_____г. (протокол № _____).
Председатель МЦК _____ /_____/

Подписан: Шевандронова Людмила Марсовна
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