**Навчально-науковий інститут аеронавігації, електроніки та телекомунікацій**

**Кафедра авіаційної англійської мови**

**Затверджую**

Зав. кафедри \_\_\_\_\_\_ Пазюра Н.В.

«\_\_ » \_\_\_\_\_\_ 2018 р.

**Модульна контрольна робота №1**

з дисципліни «Іноземна мова (за професійним спрямуванням)»

Розробник к.п.н., Немлій Л.С.

1. **Read the text. One sentence is missing in each of the paragraphs. Mark the number with a letter. One sentence is extra.**

**Electronic Devices for the home**

When people think about electronic devices for their home they may think of security systems or garage door openers, but there are several electronics devices that are perfect for any home. Electronic devices are good for security reasons and they are also good for checking to see what the weather is. **1)\_\_\_\_\_\_\_.** Homebuyers will love seeing these electronic devices in a home they are about to purchase.

Wireless Weather Station*:* Having one of these electronic devices outside your home will allow you to keep an eye on all the weather conditions. **2)\_\_\_\_\_\_\_.** After all, the weather man may know the current weather conditions at the weather station, but there's no way for him to know the conditions at your house.

Digital Door Locks*:* These electronic devices will keep your home safer, than a regular lock. Thieves are great at picking locks and most have no trouble entering a home that is "secured" with traditional door locks. **3)\_\_\_\_\_\_\_\_\_.** The digital door lock is basically a card reader. You will need to present your card to the digital door lock for the door to unlock.

Wireless Camera **:** **4)\_\_\_\_\_\_.** You can set these tiny cameras up so that they are viewable on any TV or computer inside your home. Many wireless security cameras require at least one cable or wire for power; "wireless" refers to the transmission of video/audio. **5)\_\_\_\_\_\_\_\_\_\_.**

**A)** Having these electronic devices around your home will allow you to keep an eye on what's going on outside your home.

**B)** However, some wireless security cameras are battery-powered, making the cameras truly wireless from top to bottom.

**C)** Installing one of these electronic devices in your home means that people will need cards in order to enter your locked home.

**D)** These electronic devices do more than just tell you the temperature, they also tell you the wind speed, rainfall amounts, humidity, and so much more.

**E)** Whether you invest in these electronic devices depends on how much you want to increase the value of your home.

**F)** In reception, the inverse occurs: an electromagnetic field from another source induces an alternating current in the elements and a corresponding voltage at the antenna's terminals.

1. **Match the words with their definitions:** a) iron; b) ceramic; c) ferrous materials; d) PVC; e) drafter; f) shaper; g) grinding machine; h) copper; i)speaker; j) port.
2. Metals containing iron;
3. A metal not suitable as structural material;
4. A good insulator but brittle;
5. type of plastic used for insulation;
6. a person who makes drawing;
7. a machine which is used to produce or modify flat surface;
8. widely used metal by human, in the past it was used to make cooking utensils, coins and ornamental objects;
9. a machine which removes excessive material from parts that are brought into contact with a rotating abrasive wheel;
10. any socket into which a peripheral device may be connected;
11. device used to produce voice output and play back music.
12. **Put the words into correct order to make the sentences complete.**
13. Drawing/ room temperature/ is done/ at
14. Not essential/heat/is/in the drawing process
15. Many/ sheet forming/is used/everyday objects/ to make
16. **Which type of computer do these descriptions refer to?**
17. A small computer that fits into items of clothes;
18. A portable computer that can be closed up like a briefcase, but it can be powerful as desktop PC;
19. A typical computer found in many business and popular for home use.
20. **Match each sentence with its ending.**
21. CAD designs can be
22. CAM is the use of computer software
23. The CAM system turns
24. CAD/CAM systems
25. Minimize errors and manufacturing costs.
26. The design into computer language.
27. Seen from any angle and are easily manipulated.
28. To control machine tools in the manufacturing process.
29. **Open the brackets using the right form of the verb.**
30. She just (to go) out.
31. He (to leave) the room a moment ago.
32. We (not to solve) the problem yet.
33. Kate (to cook) dinner every day.
34. Listen. Somebody (to knock) at the door.
35. If I drink too much champagne, I (to have) a headache.
36. If the weather was fine, where you (to go)?
37. If he had trained regularly, he (to win) a match last week.
38. Some of my group mates (to live) in hostel.
39. In the evenings I often (to go) to visit my friends.

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«\_\_\_»\_\_\_\_\_\_\_\_\_\_\_2018 р.

**Модульна контрольна робота №2**

з дисципліни «Іноземна мова (за професійним спрямуванням)»

Розробник к.п.н., Немлій Л.С.

1. **1. Read the text. One sentence is missing in each of the paragraphs. Mark the number with a letter. One sentence is extra.**

**Electronics today**

We are surrounded by products in and around our homes which make use of electronics in one way or another. **1)\_\_\_\_\_\_\_\_.**

And, in a more obvious way, so do a variety of home entertainment systems such as televisions, videos, hi-fis, electronic organs and home computers. **2)\_\_\_\_\_\_\_\_\_.** This is a plastic disc about 120 mm in diameter and 1.2 mm thick which stores sound in the form of microscopically small pits, each about one thousandth of a millimeter long and about a ten thousandth of a millimeter deep in a continuous spiral track.**3)\_\_\_\_\_.** Sixty minutes of sound requires about 10 million such pits on one side of the disc. The compact disc is coated with a layer of reflecting aluminum and covered by a protective film of transparent plastic.**4)\_\_\_\_\_\_\_.**

The laser beam focuses so accurately on the surface of the disc that only the pits are read, not the dust or other irregularities on its surface. The sound produced by the compact disc is almost free from distortion e.g. surface hiss, and the system is compact and rugged enough for use by a jogger.

By comparison with the first valve computers of the 1940s, today's microcomputers show how dramatic the advances in electronics have been. **5)\_\_\_\_\_.**

**A)** For example, the *compact disc* has improved the quality of sound from a hi-fi system.

**B)** It isn't always apparent that these products use electronic devices, but domestic equipment such as washing machines, central heating systems, cookers and burglar alarm systems do.

**C)** The disc is rotated at high speed in a player in which a finely focused beam of laser light 'reads' the information on the disc.

**D**) Power-hungry, room-sized and unreliable, these early computers have been replaced by a variety of compact, efficient computers such as calculators and microcomputers.

**E)** The track is so fine that about thirty are as wide as a human hair.

**F)** The optical system of a television camera includes a fixed lens that is used to focus the scene onto the front of the pickup device.

1. **Match the words with their definitions:** a)alloy; b) steel; c) concrete; d) brass; e) drafting; f) drilling machine; g) milling machine; h) gold; i) modem; j) CD/DVD drive.
2. A combination of different materials;
3. An alloy formed by mixing iron and carbon;
4. An alloy formed by mixing copper and zinc;
5. A composite material used to build houses;
6. A machine which is used to produce circular holes in meal;
7. An act and discipline of composing plans;
8. The most expensive metal and is used to create precious jewellery;
9. a machine which cuts flat metal surfaces;
10. mechanism that reads and/or writes to optical discs;
11. device that converts data so that it can travel over the Internet.
12. **Put the words into correct order to make the sentences complete.**
13. Taking their forms/ fluid substances/into moulds/solidify
14. In the past/ using/ forging/ a hammer/ was done
15. Can be/brittle materials/extrusion/done/with
16. **Which type of computer do these descriptions refer to?**
17. A hand-held computer which can be used as a telephone, a web explorer and a personal organizer;
18. A full-function PC, through it only weighs 1.2 kg – you can go to a meeting and write your notes on it, like paper notepad.
19. A large computer used for intensive data processing and often linked to many terminals;
20. **Match each sentence with its ending.**
21. CAD helps designers
22. By using a CAD technology
23. Unlike manual drawing, CAD
24. CAD allows us to save
25. time and money.
26. provides three-dimensional drawings.
27. defects can be easily found
28. to draw, modify and correct designs.
29. **Open the brackets using the right form of the verb.**
30. I (not yet to eat) today.
31. You (to play) the piano yesterday.
32. He just (to come) home.
33. They (to read) many books.
34. Look. Kate (to dance).
35. The children (to play) in the yard now.
36. He (not sleep) after dinner.
37. If the weather is good, we (to go) for a picnic.
38. If I won one million, I (to buy) a cottage.
39. If he had worked hard, he (to get) better result.

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**Затверджую**

Зав. кафедри \_\_\_\_\_\_ Пазюра Н.В.

«\_\_» \_\_\_\_\_\_ 2018 р.

**Модульна контрольна робота №3**

з дисципліни «Іноземна мова (за професійним спрямуванням)»

Розробник к.п.н., Немлій Л.С.

1.Read the text and fill the gaps with the necessary information (A-E) .

When a machine or a tool is made, the most suitable material must be chosen by considering its properties, 1) … . The main types of materials used in mechanical engineering are metals, polymer materials, ceramics and composite materials. The most commonly used materials are metals, 2)… . They can be used in their pure form or mixed with other elements. In this second case we have an alloy and it is used to improve some properties of the metals. The most commonly used ferrous metals are iron and alloys which use iron. Because iron is soft and pasty it is not suitable 3) …, so a small amount of carbon is added to it to make steel alloy.

Non-ferrous metals contain little or no **iron**. The most common non-ferrous metals used in mechanics are copper, zinc, tin andaluminium. Some common non-ferrous alloys are brass (formed by mixing copper and zinc), bronze (formed by mixing copper and tin) and other aluminium alloys 4) … . Other examples of materials used in mechanical engineering are plastic andrubber.

**PVC** or polyvinyl chloride is a type of plastic and is used to insulate wires and cables. Rubber is a polymer and its best property is elasticity, as it returns 5) … . **Ceramic** materials are good insulators: hard, resistant and strong, but brittle. Composite materials are made up of two or more materials combined 6) … . Concrete is reinforced with steel and is used in building engineering.

**A** which are used in the aircraft industry;

B which can be divided into ferrous and non-ferrous;

C to its original size and shape after deformation;

D which can be classified as mechanical, thermal, electrical and chemical';

E to improve their mechanical properties;

F to be used as a structural material;

**2. Read the text again and find words to their definitions.**

|  |
| --- |
| **1.** a combination of different metals; |
| 2. a type of plastic used for insulation ; |
| 3. an alloy formed by mixing iron and carbon; |
| 4. an alloy formed by mixing copper and zinc; |
| 5. metals containing iron; |
| 6. a composite material used to build houses; |
| 7. a metal not suitable as structural material; |
| 1. a good insulator but brittle; |

3. Read the text again and answer the questions.

1. What is the basic classification of metals?

2. What are the characteristics of iron?

3. Why are alloys created?

4. Which materials are good insulators?

5. Is steel an alloy? Which metal does it contain?

4. Read the text about the electrical distribution system and complete it with the given words:

*Pole; demand; lower voltages; consumers ;high-voltage; power plants; delivery; appliances; network; transformer.*

Electricity distribution is the final stage in the (1)\_\_\_ of electricity to end users. In order to be

able to use electric power for our daily activities, electricity must be transmitted from the (2) \_\_ to other areas where it can be distributed to different (3) \_\_\_ .

The electricity generated by power plants is increased or stepped up at substations and distributed through (4) \_\_\_transmission lines, in order to minimize energy losses and to economise on the material needed for conductors. Transmission lines use voltages as high as 765,000 volts and they are usually connected in a (5)\_\_\_. This means that if a station receives an unexpected (6)\_\_\_for electric power, it can call on the other stations to help to meet the demand.

Then electrical power is converted from high voltage to (7) thanks to step-down transformers which turn electricity into different power levels. Once it is sent to your neighbourhood, another small (8) \_\_\_mounted on a (9) \_\_\_\_ converts the power to even lower levels to be used at home. The final voltage is between 110 volts - for lights, TVs, and other smaller appliances - and 240 volts for larger (10) \_\_\_\_ .

5. Read the text again and match each sentence with its ending.

1. Power plants generate a)convert electricity from high voltage levels to lower levels.
2. Transmission lines are used b) in case of an expected demand for electric power.
3. High voltages mean c) can be safely used in businesses and homes.
4. Step-down transformers d) power and distribute it to substations.
5. Substations can help each other e)a reduction in energy losses during transmission
6. The current transmitted by poles f) to distribute high-voltage electricity to a network of substations.
7. Match the words with their definitions.
8. array A) to send a liquid or a gas through a tube;
9. kinetic B) produced by motion;
10. tide C) a group of things arranged in a particular way;
11. hot spring D) waste material from animals used as fertilizer;

5. to pipe E) the process of keeping something in good condition by regularly checking it;

1. manure F) ) unwanted material left after using;
2. waste G) a spot where hot water comes up naturally from the ground;
3. maintenance H) the regular change in the level of the sea caused by gravitational attraction of the moon and the sun;

**7. Choose the appropriate letter to complete the sentence.**

**1**. The police officer stopped us and asked us where \_\_\_\_.

A were we going B are we going C we are going D we were going

**2**. Ada \_\_\_\_\_\_\_\_\_ a snack when mother came.

**A)** is having **B)** was having **C)** has **D)** will be having

**3.** I need to have a rest. We … non-stop for four hours.

**A.** have walked **B**. walked **C.** have been walking

4. John is on holiday. He’s … to Italy.

A has gone; B went; C gone; D is going;

5. Yesterday she got up at 6 then she … breakfast.

**A** was having; **B** has; **C** has had; **D** had;

**6.** Most people … to swim when they are children.

**A** learn; **B** are learning; **C** learns  **D** were learning;

7.Tanya … German very well.

**A** has spoken; **B** spoke; **C** is speaking; **D** speaks;

**8.Write an essay with the headline – “The importance of engineering” or “Advantages and disadvantages of electronic device” (60-100 words).**

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**Модульна контрольна робота №4**

з дисципліни «Іноземна мова за професійним спрямуванням»

Розробник к.п.н., Немлій Л.С.

1. **Read the text and fill the gaps with the necessary information (A-E).**

An **electric circuit** or network is a pathway through which 1) \_\_\_. A simple circuit consists of a power source, two conducting wires, 2) \_\_\_and a device through which electricity can flow. This device is called a load and it's attached to the wires. If all the parts are properly connected, the current flows and the lamp lights up. This kind of circuit is called 'closed'.

On the contrary, if the wires are disconnected the circuit is called 3) \_\_\_. The circuit can be **opened and closed** by a device called a switch.

Loads canturn electrical energy into a more useful form. Some examples are:

* light bulbs, 4) \_\_\_;
* electric motors, which change electrical energy into mechanical energy;
* speakers, which change energy into sound.

The source provides the electrical energy used by the load. It can be a storage battery or a generator. The switch interrupts the current delivered to the load by the source and allows us 5) \_\_\_. When an abnormally high amount of current passes through a network, you get a short circuit. This may occur when there is a drop in the resistance or a broken insulation. In order to prevent short circuits, it is best to use fuses, 6) \_\_\_, interrupting in this way the circuit.

**A** each one attached to a terminal of the source;

**B** the electric current can flow;

**C** which change electrical energy into light energy;

**D** 'open' or 'broken';

**E** to control the flow;

**F** which melt when too much current flows through them;

**2. Read the text again and find words to their definitions.**

1. a device which interrupts the circuit;
2. a protective device;
3. a circuit in which wires are disconnected;
4. a device which consumes electric power;;
5. a complete circuit with no breaks at all;
6. device which provides power;
7. a pathway through which electric current flows;
8. a drop in the resistance or a broken insulation can cause…;

3.Read the text again and answer the questions.

1. What does a simple circuit consist of?
2. What happens to the lamp in a closed circuit?
3. Can you name some examples of loads?
4. What is a generator?

5.What is the function of a switch?

4.Read the text aboutUSB flash drives and fill in the gaps with the given words.

*Plugged; backup; board; moving; disadvantage; operating system; case; off-site water; pocket;*

A USB flash drive is a flash memory data storage device integrated with a USB (Universal Serial Bus) interface. USB flash drives are removable and rewritable, and they’re small enough to be carried in a (1) \_\_\_. These portable drives are faster, have thousands of times more capacity, and are more durable and reliable than CD-ROMs because of their lack of (2) \_\_\_ parts. Unlike most removable drives, a USB drive does not require rebooting after it's attached, they are very robust and use very little power. They just need to be (3)\_\_\_ into a USB port to work and they’re compatible with any modern (4)\_\_\_, such as Linux, Mac OS X and Windows.

A flash drive consists of a small printed circuit (5)\_\_\_carrying the circuit elements and a

USB connector, insulated electrically and protected inside a plastic (6)\_\_\_.

The drive is often used as a (7)\_\_\_medium to save data, because it is very user-friendly and

it can be carried (8)\_\_\_for safety despite being large enough for several backups. Moreover,

flash drives are cheaper and less fragile than many other backup systems. Its only (9)\_\_\_is that it can be easily lost because of its size and it’s easy for people without a right to data to take illicit backups. Some specially manufactured flash drives are provided with a metal or rubber case designed to be waterproof and almost unbreakable. It’s been tested that these flash drives can retain their memory even after being submerged in (10)\_\_\_, put in a washing machine and run over with a car.

5.Read the text again and decide if the following statements are true (T) or false (F), then correct the false ones.

1. Flash drives are provided with a very limited storage capacity.
2. They are lighter that other removable drives.
3. They need an external power supply to work.
4. USB flash drives are compatible with few operating systems.
5. A plastic case prevents the printed circuit board from being damaged.
6. USB drives are convenient for transferring data between computers or for personal backups.

6.Match the words with their definitions.

|  |  |  |
| --- | --- | --- |
| 1 manufacturing | A | jobs in transports, communications, hospitals, energy |
| 2 work flow | B | the amount of confidence that a group of people have |
| 3 goods | C | the state of not having a job |
| 4 service jobs | D | the process of packing and distributing goods |
| 5 skilled | E | the industry in which machinery is used to produce goods |
| 6 morale | F | A set of tasks performed to complete a procedure; |
| 7 unemployment | G | having the knowledge and the ability to do something well |
| 8 handling | H | things that are made to be sold |

**7. Choose the appropriate letter to complete the sentence.**

**1.** Alice isn’t here at the moment. She’s … to the shop to get a newspaper.

**A** has gone **B** gone **C** is gong **D** went

2.Sam took a picture of me while I … .

**A** didn’t look; **B** wasn’t looking; **C** looked; **D** look;

3.It … very much in summer.

**A** isn’t raining; **B** rains; **C** doesn’t rain; **D** rain

4.Joe isn’t lazy. She … hard most of the time.

**A** works; B is working; C work; D has work;

5This table …. of wood.

A make; B is making; Care made; D has been made;

6. Don’t make so much noise. I … to concentrate.

A am trying; B try; C was trying; D will try;

7.the bed was so uncomfortable. I … well.

A didn’t slept; B didn’t sleep; C slept; D wasn’t sleeping;

**8.Write an essay with the headline – “What should we do to save energy?” or “Pros and cons of network.” (60-100 words)**