**Task 2**

**Read the text below. For questions (6—10) choose the correct answer (A, B, C or D). Write your answers on the separate answer sheet.**

**YOUR AMAZING BRAIN**

You carry around a three-pound mass of wrinkly material in your head that controls every single thing you will ever do. From enabling you to think, learn, create, and feel emotions to controlling every blink, breath, and heartbeat—this fantastic control center is your brain. It is a structure so amazing that a famous scientist once called it "the most complex thing we have yet discovered in our universe."

Your brain contains about 100 billion microscopic cells called neurons—so many it would take you over 3,000 years to count them all. Whenever you dream, laugh, think, see, or move, it’s because tiny chemical and electrical signals are racing between these neurons along billions of tiny neuron highways. Believe it or not, the activity in your brain never stops. Countless messages zip around inside it every second like a supercharged pinball machine. Your neurons create and send more messages than all the phones in the entire world. And while a single neuron generates only a tiny amount of electricity, all your neurons together can generate enough electricity to power a low-wattage bulb.

Neurons send info to your brain at more than 150 miles (241 kilometers) per hour.  
For example, a bee lands on your bare foot. Sensory neurons in your skin relay this information to your spinal cord and brain at a speed of more than 150 miles (241 kilometers) per hour. Your brain then uses motor neurons to transmit the message back through your spinal cord to your foot to shake the bee off quickly. Motor neurons can relay this information at more than 200 miles (322 kilometers) per hour.

Riding a bike seems impossible at first. But soon you master it. How? As you practice, your brain sends "bike riding" messages along certain pathways of neurons over and over, forming new connections. In fact, the structure of your brain changes every time you learn, as well as whenever you have a new thought or memory.

It is well known that any exercise that makes your heart beat faster, like running or playing basketball, is great for your body and can even help improve your mood. But scientists have recently learned that for a period of time after you've exercised, your body produces a chemical that makes your brain more receptive to learning. So if you're stuck on a homework problem, go out and play a game of soccer, then try the problem again. You just might discover that you're able to solve it.

|  |  |
| --- | --- |
| **6.** | **According to the text, the work of brain neurons influences** |
|  | **A** electricity production. |
|  | **B** our dreams. |
|  | **C** everything we do. |
|  | **D** character of messages we send. |
| **7.** | **The narrator compares the work of neurons with pinball machine to** |
|  | **A** show the character of brain work. |
|  | **B** raise the awareness of the brain’s nature. |
|  | **C** stress the amount of information that the brain process. |
|  | **D** illustrate the shape of the neuron highways. |
| **8.** | **Comparing sensory and motor neurons, we can make a conclusion that** |
|  | **A** motor neurons transmit information faster. |
|  | **B** there are more motor neurons. |
|  | **C** sensory neurons transmit information faster. |
|  | **D** there are more sensory neurons. |
| **9.** | **The structure of brains changes when** |
|  | **A** our memory fails. |
|  | **B** new neurons appear. |
|  | **C** we are riding a bike. |
|  | **D** we acquire new knowledge. |
| **10.** | **Physical exercises proved to be good for** |
|  | **A**the production of brain chemicals. |
|  | **B** solving homework problems. |
|  | **C** giving the brain a rest. |
|  | **D** maintaining a good mood. |

**Task 3**

**Read the texts below. Match choices (A—H) to (11—16). There are two choices you do not need to use. Write your answers on the separate answer sheet.**

**5 STEPS TO A GOOD PASSWORD**

​Before we begin, we must be clear on one major expectation: there is no such thing as a perfect password. A committed hacker can crack any password, given enough time and the right 'dictionary' or 'brute force' tools. But just like breaking into a car, if the protection is strong enough, the hacker will become discouraged and commonly give up before the protection fails.

**11**A good password starts with a base word phrase. This means: choose two or more meaningful words, with the spaces removed. Choose a word phrase that says something about you (easier for you to remember). The phrase might reflect your hobby interests or a personal passion of yours. You could try using your nickname, your personal taste in music or food, or even a favourite saying. For example: Ilovecats; RedHonda; PuppyLovesCheese.

**12**​Passwords start to become strong at 6 characters long. While a long password can be annoying to type, a long password really helps to slow down brute force hacker attacks. You can do this by adding the website name or computer software name to the base phrase. For example: IlovecatsGmail; RedHondaWin7; PuppyLovesCheeseEbay.

**13**​Scrambling does not necessarily mean rearranging the letters. Rather, scrambling your password can effectively be achieved by swapping one or more of the password letters with a non-alphabetic character, and then purposely including uppercase and lowercase letters within the password. Scrambling creatively uses the shift key, punctuation marks, the @ or % symbols, and even semi-colons and periods. Using numbers as substitutes for letters is another strong scrambling technique. Examples of scrambling: ! 7ovecatsGmail; Red7ondaWin7; PuppyLovesCheese3bay

**14**​At work, your network people will require you to change your password every several days. At home, you should rotate your passwords as a matter of good computer hygiene. If you are using different passwords for different websites, you can do yourself a favour by rotating portions of your passwords every few weeks. Note that rotating parts of the password, not the entire passwords, will help deter hackers from stealing your phrases. If you can memorize three or more passwords at the same time, then you are in good shape to resist brute force hacker attacks. Examples: !7ovecatsWin7; RedHonda3bay; PuppyLovesCheeseGmail

**15**​There are several other resources for building strong passwords. You can employ a digital vault like Password Safe. This kind of software creates personal 'lockers' to keep all your passwords locked under a master password. Tools like KeyWallet Password Manager work well because you can avoid typing your passwords entirely, and just let your mouse do the data entry.

**16**    And remember! Don't leave notes with your passwords to various sites on your computer or desk. People who walk by can easily steal this information and use it to compromise your account. If you decide to save your passwords in a file on your computer, create a unique name for the file so people don't know what's inside. Avoid giving the file an obvious name, such as "my passwords." If you have a difficult time remembering multiple passwords, a trusted password manager may be a good solution. Spend a few minutes checking out the reviews and reputations of these services.

**To have a good password one should**

**A** Invent something extraordinary

**B** Substitute your password regularly

**C** Lengthen the phrase

**D**Think of numbers

**E** Use the key expression

**F** Keep your passwords secure

**G** Jumble the phrase

**H** Follow some advanced password tips

**Task 4**

**Read the text below. Choose from (A—H) the one that best fits each space (17—22). There are two choices you do not need to use. Write your answers on the separate answer sheet.**

**WIRELESS NETWORKING ROUND-UP**

 Internet has become so widespread **(17)\_\_\_\_\_\_\_\_\_\_.** In fact the internet is the fastest growing WAN in the world, and its size keeps growing each and every single day. Today we seek out information on the internet rummaging through bits and pieces trying to find what you need. Wouldn't it be cool if we could instead get this information to reach you, instead of you looking for it? This is where the future of the Internet lays people, **(18)\_\_\_\_\_\_\_\_\_\_.**

 In short Bluetooth wireless technology is an open specification for short-range wireless communication between electronic devices, be it a mobile phone, PC, Microwave, etc.. It offers a very low cost, low power consuming solution to communicate **(19)\_\_\_\_\_\_\_\_\_\_.**  The Bluetooth standard defines a rigid structure for a wide range of devices to communicate with each other, with minimal or no user intervention.

The real cool fact about Bluetooth devices is that they're made under very strict standardizations. As a result any Bluetooth device in the world can connect to other Bluetooth devices in its proximity irrespective of the brand.

One of Bluetooth's main strength is its ability to simultaneously handle both data and voice transmissions.

Taking a small history lesson, Bluetooth was invented very recently, **(20)\_\_\_\_\_\_\_\_\_\_**by L.M. Ericson. Where does the name come from? Well Bluetooth is named after a king of Denmark called Harold Blaatand "Bluetooth" II. He was practically good at getting people work together.

There are many applications which have been proposed for Bluetooth devices. Some of the most popular ones are **(21)\_\_\_\_\_\_\_\_\_\_.** The headsets will allow access to user's mobile phone even while the device is in the user's pocket. It's a total hands free solution.

Right now however Bluetooth technology is still evolving and we do not see much applications of it other than in some phones. If you cannot afford to get a wireless LAN, this would be the next ideal step towards being wireless. Even though the technology does not offer high bandwidth, you can still browse the net, transfer files, **(22)\_\_\_\_\_\_\_\_\_\_.** Overall a really very well designed device and very practical.

**A**the Wireless headsets for mobile devices

**B**with fixed or portable electronic devices

**C**in fact it was in 1994

**D**that we see it merely as a mode of distributing information

**E**which are mostly what we require from a LAN anyway

**F** what “allowed greater communications between people”

**G** where wireless technology will take over most of our daily lives

**H** which was so usual for those times