Corso di Laurea in Biologia: Abilità Linguistiche 1° anno (A.A. 2016-17) **17 luglio 2017**
Tempo della prova: 2 ore

1. VERB FORMS (5 points). *Give the correct forms of the verbs and, when required, pronouns or adverbs. You may have to use auxiliary verbs as well as main verbs. Look at the example below.*

Example: When the telephone _____ (RING) I _____ (WATCH) television.
When the telephone _rang_ I _was watching_ television.

1. Yesterday I _____ (**MEET**) Anna and Tom in Cagliari. I _____ (**KNOW**) them for a long time.
2. What did Mary do before she _____ (**GO**) to university? And what is she going to do when she _____ (**FINISH**) university?
3. Rooney kicked the ball and it_____ (**BE**) a goal! I wish I _____ (**CAN**) play football as well as Rooney.
4. Smoking _____ (**NOT ALLOW**) in the university library. This is the third time that I _____ (**TELL**) you.
5. Mark usually _____ (**HAVE**) lunch where he works. But today he _____ (**EAT)** at home.

2. QUESTION FORMATION (5 points). *Write appropriate questions for the following five answers. Look at the example below.*

Example: It's half-past nine.
What time is it, please?

1. I can speak two languages.
2. Peter left home at 8 o'clock.
3. I have studied English for two years.
4. Jane is going to London for her holidays.
5. This computer costs €450.

3. SENTENCE TRANSFORMATION (5 points). *Complete the second sentence so that it has the same meaning as the first.* ***Do not use more than three words****. Look at the example below.*

Example: You are too young to drive a car. You are __*not old enough*__ to drive a car.

1. David cleans the house every week. → The house _____ David every week.
2. Mary is shorter than Peter. → Mary is not _____ Peter.
3. It's not warm enough to go outside. → It's too _____ outside.
4. Many poor people live in this city. → _____ poor people who live in this city.
5. Yesterday John lent me his car. → Yesterday I _____ car.

4. GUIDED WRITING (5 points). You have started to study biology at university. You have recently received an email from Alan, who was your best friend at school. He is now studying business management at university. *Write an email to Alan. Do the following things: (1) thank him for his email, (2) say why you think biology is more interesting than business management and (3) say that you would like to meet him for a pizza soon. Write between 70 and 100 words.*

Segue sul retro

5. LEXIS FOR BIOLOGY (10 points)

*Read all of this text. Then write an appropriate word or expression for each of the ten spaces. Look at the example in number **0**.*

HOW DO ORGANISMS OBTAIN FOOD?

All organisms need **(0) f** food in the form of proteins, carbohydrates and fats. But there is one major difference in how they resolve this problem. Some organisms such as plants can make their own food; other organisms such as human **(1) b**_______ have to eat other organisms to obtain their food. Biologists therefore have two separate categories to reflect how living things obtain their food: autotrophs and heterotrophs. Autotrophs are "self-feeders": *auto* means "self" and *troph* means "feed". Examples of autotrophs are plants, **(2) a** _______ and green bacteria. Heterotrophs have to eat other organisms to get their food: *hetero* means "other", so heterotrophs are "other-feeders". Examples of heterotrophs are animals, fungi and most bacteria.

Food is made through one process called photosynthesis and broken **(3) d** _______ through another process called cellular respiration. *Only* autotrophs engage in photosynthesis. This is a process that uses energy from the Sun, carbon **(4) d** _______ from the air and water from the soil. *Both* autotrophs *and* heterotrophs engage in cellular respiration, a process that uses **(5) o**_______ to break down food molecules such as sugars. The energy stored in the bonds of the food molecules is transferred to ATP – **(6) a** _______ triphosphate. If you think about it, photosynthesis and cellular respiration are really the **(7) o** _______ of each other. Photosynthesis consumes carbon dioxide and water, and produces food and oxygen. Cellular respiration consumes food and oxygen, and produces carbon dioxide and water.

Photosynthesis consists of two main processes. First, during the light reactions of photosynthesis, chloroplasts absorb light energy from the Sun and then **(8) t** _______ it into the chemical energy stored in ATP. Second, the reactions of photosynthesis that are independent of light (= "light-independent reactions of photosynthesis") produce food. They form a metabolic cycle that is **(9) k** _______ as the Calvin-Benson cycle. As their name implies, these light-independent reactions of photosynthesis occur without sunlight.

One final point is that the energy obtained from food cannot be created or destroyed. Instead it is transferred when it moves from one place to another. And it is transformed when it **(10) c** _______ from one form to another.

ANSWERS / SOLUZIONI

1. VERB FORMS (5 points). *Give the correct forms of the verbs and, when required, pronouns or adverbs. You may have to use auxiliary verbs as well as main verbs. Look at the example below.*

Example: When the telephone _____ (RING) I _____ (WATCH) television.
When the telephone _rang_ I _was watching_ television.

1. Yesterday I _**MET**____ (MEET) Anna and Tom in Cagliari. I _**HAVE KNOWN**__ (KNOW) them for a long time.
2. What did Mary do before she _**WENT**____ (GO) to university? And what is she going to do when she _**FINISHES**____ (FINISH) university?
3. Rooney kicked the ball and it_**WAS**__ (BE) a goal! I wish I _**could**____ (CAN) play football as well as Rooney.
4. Smoking _**IS NOT ALLOWED**__ (NOT ALLOW) in the university library. This is the third time that I __**HAVE TOLD**___ (TELL) you.
5. Mark usually _**HAS**____ (HAVE) lunch where he works. But today he _**IS EATING / IS GOING TO EAT / WILL EAT** _/ **ATE**__ (EAT) at home.

2. QUESTION FORMATION (5 points). *Write appropriate questions for the following five answers. Look at the example below.*

Example: It's half-past nine.
What time is it, please?

1. I can speak two languages. **How many languages can /do you speak?**
2. Peter left home at 8 o'clock. **When did Peter leave home?**
3. I have studied English for two years. **How long have you studied English?**
4. Jane is going to London for her holidays. **Where is J. going for her holidays?**
5. This computer costs €450. **How much does this computer cost?**

3. SENTENCE TRANSFORMATION (5 points). *Complete the second sentence so that it has the same meaning as the first.* ***Do not use more than three words****. Look at the example below.*

Example: You are too young to drive a car. You are __*not old enough*__ to drive a car.

1. David cleans the house every week. → The house _**IS CLEANED BY**_ David every week.
2. Mary is shorter than Peter. → Mary is not _**AS TALL AS**_/ **NOT TALLER THAN**_ Peter.
3. It's not warm enough to go outside. → It's too _**COLD TO GO**____ outside.
4. Many poor people live in this city. → _**THERE ARE MANY**_ poor people who live in this city.
5. Yesterday John lent me his car. → Yesterday I _**BORROWED / WAS LENT JOHN'S** __ car.

4. GUIDED WRITING (5 points). You have started to study biology at university. You have recently received an email from Alan, who was your best friend at school. He is now studying business management at university. *Write an email to Alan. Do the following things: (1) thank him for his email, (2) say why you think biology is more interesting than business management and (3) say that you would like to meet him for a pizza soon. Write between 70 and 100 words.*

Credit will be given for good grammar, appropriate lexis and completion of the three tasks.

Example,

Dear Alan,

Thanks for your email. It was lovely to receive your news. I am pleased that you are well and that you are enjoying your university course in business management.

However, speaking personally, I am glad I am studying biology and not business management. This year we are studying the structure of living cells and next year we will study the structure and functions of DNA. Although business management helps you to make money, biology helps you to understand what an incredible machine your body is. It has so many systems that work together and help you to survive.

Are you free next week? Perhaps we could go for a pizza and exchange our news. Do write to me again.

Very best wishes
John

5. LEXIS FOR BIOLOGY (10 points)

*Read all of this text. Then write an appropriate word or expression for each of the 10 spaces. Look at the example in number **0**.*

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Food is made through one process called photosynthesis and broken **(3) d _DOWN______** through another process called cellular respiration. *Only* autotrophs engage in photosynthesis. This is a process that uses energy from the Sun, carbon **(4) d _DIOXIDE__** from the air and water from the soil. *Both* autotrophs *and* heterotrophs engage in cellular respiration, a process that uses **(5) o__OXYGEN_** to break down food molecules such as sugars. The energy stored in the bonds of the food molecules is transferred to ATP – **(6) a _ADENOSINE______** triphosphate. If you think about it, photosynthesis and cellular respiration are really the **(7) o _OPPOSITE__** of each other. Photosynthesis consumes carbon dioxide and water, and produces food and oxygen. Cellular respiration consumes food and oxygen, and produces carbon dioxide and water.

Photosynthesis consists of two main processes. First, during the light reactions of photosynthesis, chloroplasts absorb light energy from the Sun and then **(8) t _TRANSFORMS___** it into the chemical energy stored in ATP. Second, the reactions of photosynthesis that are independent of light (= "light-independent reactions of photosynthesis") produce food. They form a metabolic cycle that is **(9) k __KNOWN__** as the Calvin-Benson cycle. As their name implies, these light-independent reactions of photosynthesis occur without sunlight.

One final point is that the energy obtained from food cannot be created or destroyed. Instead it is transferred when it moves from one place to another. And it is transformed when it **(10) c _CHANGES_** from one form to another.