Corso di Laurea in Biologia: Abilità Linguistiche 1° anno (A.A. 2016-17) 15 giugno 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. At the moment John _____ (**ENJOY**) his two-week holiday in London. He says he _____ (**NOT WANT**) to come back to Sardinia.
2. Last week I _____ (**SPEAK**) to Anna who is a nurse in a hospital. She _____ (**DO**) this work for two years.
3. Look at those blacks clouds! It _____ (**GO**) to rain. If I decide to go out this afternoon, I _____ (**NEED**) to take an umbrella.
4. If instead of living in a city we _____ (**LIVE**) near the sea, we _____ (**CAN**) go to the beach every day in summer.
5. The man _____ (**ARREST**) by the police yesterday. He _____ (**NOT HAVE**) to go to prison immediately.

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've got two English friends.
2. We're going to the beach this weekend.
3. No, I haven't read this book.
4. I'm studying biology.
5. Ester lives in Gonnostramatza.

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. Tokyo is not as big as Los Angeles. → Tokyo _____ Los Angeles.
2. "What time is it?" Mary asked Jane. → Mary asked Jane _____ was.
3. It's hot in this laboratory. → _____ high air temperature in this laboratory.
(3) Eating lots of salt is bad for your health. → It is not _____ health to eat lots of salt.
4. Is this book expensive? → Does this book _____ of money?
5. ABBA won the Eurovision Song Contest in 1974. → In 1974 the Eurovision Song Contest _____ ABBA.

4. GUIDED WRITING (5 points). *Read this part of an email that you have received from your English friend*: **"I play the guitar and sing in a rock band. We sometimes play at our friends' parties. Tell me about the music you like listening to. Can you play a musical instrument?"** *Write an email to your friend. Do the following things: (1) thank him/her for his/her email, (2) say if you can play a musical instrument or if you can sing, (3) write about the music you like. 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**.*

CARBOHYDRATES, PROTEINS, NUCLEIC ACIDS, AND LIPIDS

The four most common elements **(0) f** *found* in living things are hydrogen, carbon, nitrogen, and oxygen, all of which are present in air, plants, and water. Carbon atoms, with their six protons and an outer shell of four **(1) e** _____, are the central focus of organic chemistry. They are central to all organisms because they are found in carbohydrates, proteins, nucleic acids, and lipids – otherwise known as the structural materials of all living things. The following paragraphs describe some of the basic functions of these materials.

Carbohydrates are compounds of carbon, hydrogen, and oxygen that living creatures can **(2) b** _____ down quickly, and that provide short-term energy. Most of the names of carbohydrates end in *ose* – glucose, fructose, ribose, sucrose, maltose. These are all **(3) s** _____ that dissolve in water, taste sweet and can form crystals.

Proteins, **(4) w**_____ are made from amino acids, have several functions. Some proteins are enzymes that speed up the rate of chemical reactions. Other proteins include structural ones that reinforce cells and **(5) t**_____ . There are also transport proteins, such as hemoglobin, that move materials around cells and around the body. The genetic information in cells requires amino acids to **(6) l**_____ together in a certain order, forming chains called polypeptide chains.

Nucleic acids are large molecules that carry many small details, specifically all the genetic information for an organism. Even though animals, plants, fungi and bacteria behave very differently, they contain the **(7) s** _____ chemical 'ingredients' that make up very similar genetic material. Nucleic acids are composed of strands of nucleotides that have three components: a nitrogenous base, a sugar containing five carbon molecules, and a **(8) p** _____ group. For example, DNA (deoxyribonucleic acid) has two strands of nucleotides arranged in a way that looks like a twisted ladder or a 'double helix'.

In addition to carbohydrates, proteins and nucleic acids, the human body needs one more type of large **(9) m** _____ to survive: lipids. This word is a loosely defined term for substances of biological origin that are soluble in nonpolar solvents. Lipids are sometimes seen as a synonym of 'fats'. But fats are a subgroup of lipids called triglycerides that are important for energy storage and insulation. In people, these triglycerides are formed from an excess of **(10) g** _____ .

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. At the moment John **_IS ENJOYING____** (ENJOY) his two-week holiday in London. He says he_ **DOES NOT WANT _/_ WOULD NOT____** (NOT WANT) to come back to Sardinia.
2. Last week I **_SPOKE_/ WAS SPEAKING___** (SPEAK) to Anna who is a nurse in a hospital. She **_HAS DONE_ / HAS BEEN DOING / HAS TO DO** (DO) this work for two years.
3. Look at those blacks clouds! It **_IS GOING____** (GO) to rain. If I decide to go out this afternoon, I _ **WILL NEED_/ AM GOING TO NEED___** (NEED) to take an umbrella.
4. If instead of living in a city we **_LIVED____** (LIVE) near the sea,, we **COULD___** (CAN) go to the beach every day in summer.
5. The man **_WAS ARRESTED__** (ARREST) by the police yesterday. He **_DOES NOT HAVE/ HAS NOT GOT__ / __DIDN'T HAVE / WILL NOT (WON'T) HAVE___** (NOT HAVE) to go to prison immediately. .

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've got two English friends. **How many (English) friends have you got? / Do you have any (English) f.?**
2 We're going to the beach this weekend.**What are you going to do this w?/ When are you going to the beach? / Are you going to the b.this w?**
3. No, I haven't read this book. **Have you read this book?**
4. I'm studying biology. **What are you studying?**
5. Ester lives in Gonnostramatza. **Where does Ester live?**

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. Tokyo is not as big as Los Angeles. → Tokyo **__IS SMALLER THAN_** Los Angeles.
2. "What time is it?" Mary asked Jane. → Mary asked Jane **_WHAT THE TIME/WHAT TIME IT_** was.
3. It's hot in this laboratory.→ **_THERE IS A ____** high air temperature in this laboratory.
(3) Eating lots of salt is bad for your health.→ It is not **GOOD FOR YOUR** health to eat lots of salt.
4. Is this book expensive? → Does this book **_COST A LOT_/ COST LOTS OF___** of money?
5. ABBA won the Eurovision Song Contest in 1974.→In 1974 the ESC **_WAS WON BY_ / WINNER WAS** ABBA.

4. GUIDED WRITING (5 points). *Write between 70 and 100 words.*

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

Example,

Dear John,

Thanks for your email yesterday. It was great to hear from you. I'm glad to hear that you're still busy making music.

In the past I used to like 1960s and 1970s rock music a lot: Black Sabbath, Led Zeppelin (with Robert Plant), Hawkwind and Motorhead (with Lemmy), especially their live album "No Sleep 'til Hammersmith". But for me, today, these sounds are noise rather than music. They give me a bad headache.

So my taste in music has changed. Now I like to listen to Chopin's 'Nocturnes', especially when played by the pianist Maria João Pires. She makes the piano sing like a human voice ("il bel canto"). When I have the time I like to play the piano myself. I can play only a few pieces. They include "Happy Birthday to You" and Verdi's "Va' Pensiero" from the opera "Nabucco".

Stay well. Do write to me again,
Peter.

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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Carbohydrates are compounds of carbon, hydrogen, and oxygen that living creatures can **(2) b _BREAK_** down quickly, and that provide short-term energy. Most of the names of carbohydrates end in *ose* – glucose, fructose, ribose, sucrose, maltose. These are all **(3) s _SUGARS / SUBSTANCES__** that dissolve in water, taste sweet and can form crystals.

Proteins, **(4) w_WHICH___** are made from amino acids, have several functions. Some proteins are enzymes that speed up the rate of chemical reactions. Other proteins include structural

ones that reinforce cells and **(5) t_TISSUES_** . There are also transport proteins, such as hemoglobin, that move materials around cells and around the body. The genetic information in cells requires amino acids to **(6) l___LINK__** together in a certain order, forming chains called polypeptide chains.

Nucleic acids are large molecules that carry many small details, specifically all the genetic information for an organism. Even though animals, plants, fungi and bacteria behave very differently, they contain the **(7) s _SAME_** chemical 'ingredients' that make up very similar genetic material. Nucleic acids are composed of strands of nucleotides that have three components: a nitrogenous base, a sugar containing five carbon molecules, and a **(8) p _PHOSPHATE_____** group. For example, DNA (deoxyribonucleic acid) has two strands of nucleotides arranged in a way that looks like a twisted ladder or a 'double helix'.

In addition to carbohydrates, proteins and nucleic acids, the human body needs one more type of large **(9) m _MOLECULE_____** to survive: lipids. This word is a loosely defined term for substances of biological origin that are soluble in nonpolar solvents. Lipids are sometimes seen as a synonym of 'fats'. But fats are a subgroup of lipids called triglycerides that are important for energy storage and insulation. In people, triglycerides are formed from an excess of **(10) __GLUCOSE_** .