Biology: First year English Language Course 12 February 2020 Time allowed: 2 hours 1. VERB FORMS (5 points). Give the correct forms of the verbs and, when required, pronouns or adverbs. You may have to use negative forms, and auxiliary verbs as well as main verbs. Look at the example below. **Example:** When the telephone _____ (RING) I _____ (WATCH) television. When the telephone <u>rang</u> I <u>was watching</u> television. 1. I _____ (WRITE) this email from the beach where it's very hot in summer. But it _____ (RAIN) a lot here in winter. 2. Lisa and Anna _____ (COME) to my house last night. We _____ (SPEAK) about many things. 3. Alan lives in Cagliari. He _____ (LIVE) there for ten years. Before 2010 ____ (LIVE) in Milan. 4. I have finally stopped _____ (SMOKE). Isn't that great? When I next _____ (SEE) you, I will be a different person. 5. My father suffers a lot from stress. If only he _____ (CAN) stop working and retire, he _____ (GO) to a country like New Zealand where life is a lot slower. 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. My mother's favourite singer is Elton John. 2. Chiara comes from Italy. 3. Yes, I've done the shopping. 4. Enrica's going to Australia for her holidays. 5. No, I don't eat meat. 3. SENTENCE TRANSFORMATION (5 points). Complete the second sentence so that it has the same meaning as the first. **Do not use more than five 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. They speak English at this hospital. → English _____ at this hospital. 2. Michael lent Steve his car. → Steve ____ car. 3. This month is colder than last month \rightarrow Last month _____ this month. 4. Professor Smith gave the lesson on DNA. → The lesson on DNA _____ Professor Smith. 5. Remember to bring the book. → Don't _____ the book.

4. GUIDED WRITING (**5 points**). Write a letter to your English friend about your favourite places in Sardinia. Do two things: (1) say whether you prefer the country or towns and cities, and (2) say what you like doing in your favourite places (e.g., walking in the mountains, looking for asparagus, eating in restaurants or seeing members of your family). Write between 70 and 100 words. You can write more words if you want.

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**.

BIOLOGICAL EVOLUTION

From anc	ient Greek times until the	e end of the fourteenth (0)	c <u>century</u> , people believed	
that all animals a	nd plants had been create	ed at the same time. The	concept of biological evolution	
(that is, the chang	ges of living things throu	gh time) did not exist. Fr	om the beginning of the fifteenth	
century, explorer	s and scientists challenge	ed this idea of a static uni	verse in which nothing	
(1) c	In the nineteenth centu	ury, the naturalist Charles	Darwin noticed	
(2) t	a type of bird in South America and the same type of bird in the Galapagos Islands			
(nearly 600 miles	s away) had different char	racteristics (or traits) that	were the result of adaption to	
their unique envi	ronments. Today this kin-	d of biological evolution	has a special name. It is	
(3) c	_ "adaptive radiation".			
Further re	esearch led Darwin to two	related conclusions. Fire	st, species that do not adapt to	
changing enviror	mental conditions may b	pecome (4) e	. Second, biological evolution	
occurs as a result	of natural selection, whi	ch is the theory that in ar	y given generation some	
individuals are m	ore likely to (5) s	than others. Since	many scientific data support the	
idea of biologica	l evolution through natur	al selection, and because	no scientific evidence has been	
found to show th	at this idea is false, it is c	considered to be a scientif	ic theory.	
The vario	us types of evidence that	support this theory consi	st of firstly, biochemistry (all	
living organisms	have evolved from the sa	ame processes of storing	store their genetic material in	
DNA and building	g (6) p out o	of the same amino acids)	second, comparative anatomy	
(the arm of a hun	nan, the front leg of a cat	, the flipper of a whale ar	nd the wing of a bat have	
similarities even	though these animals live	e in very different (7) e _); third, geographic	
distribution of sp	ecies (groups of living th	nings that are related to ea	ch other exist near each other	
because they (8)	c from the s	same common ancestor);	fourth, molecular biology (e.g.,	
humans and chin	panzees have the same a	mino acid sequences in t	heir cytochrome c proteins, which	
shows that they s	eparated only very "recen	ntly" in evolutionary tern	ns); fifth, fossil records that	
establish a timeli	ne of different types of li	ving things that begins w	ith the appearance of prokaryotic	
(9) c	; sixth, the ways in whi	ich certain bacteria, in ord	der to survive, develop resistance	
to the use of anti	piotics to treat (10) i	; and lastly, radi	oisotope dating.	

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 negative forms, and auxiliary verbs as well as main verbs. Look at the example below.			
Example: When the telephone (RING) I (WATCH) television. When the telephone I was watching_ television.			
1. I _AM WRITING (WRITE) this email from the beach where it's very hot in summer. But it			
RAINS (RAIN) a lot here in winter.			
2. Lisa and Anna _CAME_ (COME) to my house last night. We _SPOKE_ (SPEAK) about many things.			
3. Alan lives in Cagliari. He _HAS LIVED_ (LIVE) there for ten years. Before 2010 _HE LIVED			
(LIVE) in Milan.			
4. I have finally stoppedSMOKING (SMOKE). Isn't that great? When I nextSEE (SEE) you, I			
will be a different person.			
5. My father suffers a lot from stress. If only he _COULD (CAN) stop working and retire, he _WOULD			
GO (GO) to a country like New Zealand where life is a lot slower.			
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. My mother's favourite singer is Elton John. Who's your mother's favourite singer?			
2. Chiara comes from Italy. Where does Chiara come from?			
3. Yes, I've done the shopping. Have you done the shopping?			
4. Enrica's going to Australia for her holidays. Where will Enrica go / is Enrica going/ is Enrica going to			
go for her holidays?			
5. No, I don't eat meat. Do you eat meat?			
 3. SENTENCE TRANSFORMATION (5 points). Complete the second sentence so that it has the same meaning as the first. Do not use more than five words. Look at the example below. Example: You are too young to drive a car. You arenot old enough_ to drive a car. 			
1. They speak English at this hospital. → English _IS SPOKEN at this hospital.			
2. Michael lent Steve his car. → Steve _BORROWED MICHAEL'S car.			
3. This month is colder than last month → Last month _WAS WARMER THAN / WAS NOT AS COLD			
AS_ this month.			
4. Professor Smith gave the lesson on DNA. → The lesson on DNA _WAS GIVEN BY Professor Smith.			
5. Remember to bring the book. → Don't FORGET TO BRING the book.			

4. GUIDED WRITING (5 points).

Write a letter to your English friend about your favourite places in Sardinia. Do two things: (1) say whether you prefer the country or towns and cities, and (2) say what you like doing in your favourite places (e.g., walking in the mountains, looking for asparagus, eating in restaurants or seeing members of your family). Write between 70 and 100 words. You can write more words if you want.

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

Example (100 words),

Dear Tony,

I am writing to tell you about my favourite places in Sardinia. The beaches are wonderful in summer and the cultural life in the cities is interesting. But most of all I prefer walking in the country, listening to the birds, breathing the fresh air, and looking at the views of the mountains and the blue sea. In the evening it's nice to come back to a town or small village and eat a delicious meal in a restaurant. When you go back to working in a call centre on Monday morning, you feel refreshed.

Best wishes,

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**.

BIOLOGICAL EVOLUTION

From ancient Greek times until the end of the fourteenth (0) c <u>century</u>, people believed that all animals and plants had been created at the same time. The concept of biological evolution (that is, the changes of living things through time) did not exist. From the beginning of the fifteenth century, explorers and scientists challenged this idea of a static universe in which nothing

(1) c __CHANGES__. In the nineteenth century, the naturalist Charles Darwin noticed (2) t __THAT__ a type of bird in South America and the same type of bird in the Galapagos Islands (nearly 600 miles away) had different characteristics (or traits) that were the result of adaption to their unique environments. Today this kind of biological evolution has a special name. It is (3) c __CALLED __ "adaptive radiation".

Further research led Darwin to two related conclusions. First, species that do not adapt to changing environmental conditions may become (4) e _EXTINCT_ . Second, biological evolution occurs as a result of natural selection, which is the theory that in any given generation some individuals are more likely to (5) s _SURVIVE___ than others. Since many scientific data support the idea of biological evolution through natural selection, and because no scientific evidence has been found to show that this idea is false, it is considered to be a scientific theory.

The various types of evidence that support this theory consist of firstly, biochemistry (all living organisms have evolved from the same processes of storing store their genetic material in DNA and building (6) p _PROTEINS__ out of the same amino acids); second, comparative

anatomy (the arm of a human, the front leg of a cat, the flipper of a whale and the wing of a bat have similarities even though these animals live in very different (7) e __ENVIRONMENTS_); third, geographic distribution of species (groups of living things that are related to each other exist near each other because they (8) c __COME_ from the same common ancestor); fourth, molecular biology (e.g., humans and chimpanzees have the same amino acid sequences in their cytochrome c proteins, which shows that they separated only very "recently" in evolutionary terms); fifth, fossil records that establish a timeline of different types of living things that begins with the appearance of prokaryotic (9) c _CELLS_; sixth, the ways in which certain bacteria, in order to survive, develop resistance to the use of antibiotics to treat (10) i _INFECTIONS__; and lastly, radioisotope dating.