



**PAMIBIA UNIVERSITY**  
**OF SCIENCE AND TECHNOLOGY**

**FACULTY OF COMMERCE HUMAN SCIENCES AND EDUCATION**

**DEPARTMENT OF LANGUAGES**

<b>LEVEL: 5</b>	
<b>COURSE CODE: EPR511S</b>	<b>COURSE NAME: ENGLISH IN PRACTICE</b>
<b>SESSION: JUNE 2022</b>	<b>PAPER: LANGUAGE</b>
<b>DURATION: 3 HOURS</b>	<b>MARKS: 100</b>
<b>FIRST OPPORTUNITY EXAMINATION</b>	
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<b>MODERATOR:</b>	MRS. T. Kanime
<b>INSTRUCTIONS</b>	
1. Answer ALL the questions. 2. Write clearly and neatly. 3. Number the answers clearly. 4. Indicate whether you are a FM, PM or a DI student on the cover of your answer booklet	

**THIS QUESTION PAPER CONSISTS OF 9 PAGES (Including this front page)**

Read the passage below and then answer all the questions that follow.

**What does being bilingual do to the brain?**

In this extract from *The Bilingual Brain*, neuropsychologist Albert Costa explains the differences between bilingual and monolingual brains.

By **Albert Costa**

04th March, 2020

Any learning that we carry out has an effect on our brain. Learning is possible thanks to the plasticity of the brain, which involves the creation of new connections between neurons as a consequence of storing new information.

Throughout life we learn factual or declarative information about the world around us: words, phone numbers, land masses, the ingredients of an omelette, our city's streets, the rankings of our favourite teams, the names of the elements of the periodic table, that cod and rice is better if the rice has peas in it, and so on.

This type of information is what we often say is *learned by heart*, and we see how, as some neurodegenerative diseases progress, it disappears. But we also learn how to do things: to walk, cycle, swim, drive a car, speak and read, and so on. This is what we call procedural information, which is what allows us to carry out highly automated activities.

Learning a language involves the absorption of these two different types of information, since on the one hand, we have to acquire the lexical items (vocabulary) and on the other, the grammatical processes to combine them (syntax).

But how does the acquisition and use of two languages affect the brain? In other words, is there a difference between the brain of bilinguals and that of monolinguals in terms of the neural network responsible for processing language(s)?

Neuroimaging techniques have been fundamental in answering this question. At the functional level, several studies have shown that there are differences between the activation levels of certain areas of the brain when bilingual and monolingual individuals process their first language.

Perhaps the most complete study on this issue was conducted by Cathy Price and her collaborators at University College London, in which the brain activities of highly proficient Greek-English bilinguals and monolingual English speakers were studied across various linguistic tasks.

The results showed that brain activity in language comprehension tasks, such as speech perception, was very similar for both groups. However, those tasks that involved the language production system, such as picture naming or reading aloud, *did* reveal differences. Specifically, bilinguals showed greater activation in five areas of the brain located in the left frontal and temporal lobes.

Other studies suggest that these same areas of the brain are related to effects of frequency of use and linguistic control. What is important to note is that, at least in this study, no significant differences were observed in the areas that were activated in bilinguals and monolinguals.

To a large extent they were the same, although, yes, with greater intensity for bilinguals. These results were interpreted by the authors as evidence that, either due to the lower use of each of the languages or the need to control interferences (or both reasons), bilingual speakers require a certain overexertion during speech production compared to monolinguals.

It seems premature to discard the idea that there may be certain areas that are activated more in bilinguals. And it is very possible that these areas have to do with control processes and not so much with the representation of linguistic knowledge.

Dr. Mariano Sigman, a neuroscientist and author of *The Secret Life of the Mind*, claims that babies who grow up bilingual have brain functions that are superior to those of monolingual children, because they have better cognitive control.

Many studies undertaken on children show that the likelihood of them doing well in society from an economic perspective is closely related to cognitive control," explains Sigman. "People who have good cognitive control do well at school, typically find better jobs and are healthier. They have better social insertion," he says.

"Cognitive control has many aspects," he explains. "Such as the ability to pay attention, the ability to plan and the ability to switch easily between tasks. One of the things most studied about bilingualism is task-switching, and bilingual children consistently outperform monolingual children in this regard. The same is true of adults and experiments highlighted by Sigman in his book shed light on why this happens.

"When their brain activity was measured, it showed that they were using the language network in their brain. In other words, their brain's ability to switch between languages came in useful for other types of tasks."

However, it was once believed that trying to learn more than one language at a time would be too confusing for small children. "Once upon a time, we also believed that the world was flat," says Dr Sigman.

Another common believe about bilingualism was that different people should be consistent in speaking only one language, for instance, a French mother should only speak French to her child; or the child should only speak Spanish in school and English at home, for example.

"But this isn't true. Babies are very good at picking facial cues to tell them what language people are speaking. What this means is that babies become very good at understanding context." Explains Dr Sigman.

Countless studies have argued the case for bilingualism. "Perhaps we should promote bilingualism," concludes Sigman. "Amid so many less effective and more costly methods of stimulating cognitive development, this is a much simpler more beautiful and enduring way to do so."

[Source: Compiled and adapted from [www.bbcmagazines](http://www.bbcmagazines)]

1. Explain what happens in the brain when we learn something. (2)
2. (i) Name the two types of information that people learn throughout life. (2)  
(ii) Explain the difference between these two types of information. (2)
3. When learning a language, which type of information is the following an example of?  
(i) forming sentences  
(ii) learning different words (2)
4. How were scientists able to determine whether the brains of bilinguals differ from those of monolinguals? (2)
5. (i) What was the purpose of the study conducted by Cathy Price? (2)  
(ii) What were the finding of this study? (3)
6. Give a possible explanation for why the brains of bilingual speakers show greater activity during speech production. (2)
7. Name two myths about bilingualism. (2)
8. Name three advantages of having a good cognitive control. (3)
9. What possible explanation is there for the fact that bilingual adults were better at task-switching than monolingual adults? (1)
10. How do babies/toddlers in bilingual households know which language their parents or teachers speak? (2)

## SECTION B: GRAMMAR

[25]

Read the article below and then answer all the grammar questions that follow.

### **Bilingualism: What happens in the brain?**

In our increasingly global society, bilingualism – or the ability to speak two languages – (i) (to be) on the rise. How the brains of bilingual people differ from their monolingual counterparts is an emerging area of research.

Attitudes toward bilingualism (ii) (to change) significantly in the past 50 years. Gone are the days when using a second language in the home was frowned upon, labeled as confusing for children and supposedly holding back their development.

Instead, the number of bilinguals (iii) (to rise) steadily. Data from the United States Census Bureau show that between 2009 and 2013, around 20.7 percent of people over the age of 5 (iv) (to speak) a language other than English at home. This number has more than doubled since 1980, when it stood at 9.6 percent.

With a rising number of bilingual people comes increased research into the science that (v) (to underpin) this skill. Do the brains of bilinguals differ from those of monolinguals? And do bilinguals have the edge over monolinguals when it comes to cognitive functioning and learning new languages?

### Dispelling myths

A 2015 review in the journal *Seminars in Speech and Language* explains how bilingual children develop their language skills, dispelling commonly believed myths.

According to authors Erika Hoff, a professor of psychology at Florida Atlantic University in Boca Raton, and Cynthia Core, an associate professor of speech, language and hearing science at the George Washington University in Washington, D.C., newborns can distinguish between different languages.

They are also capable of developing vocabulary in two languages without becoming confused. When bilinguals mix words from different languages in one sentence – which is known as code-switching – it is not because they cannot tell which word (vi) (to belong) to which language.

Interestingly, children seem to naturally develop an understanding of who in the house speaks which language early on, and they will often choose the correct language to communicate with a particular individual – a phenomenon I have witnessed with my daughter, who is exposed to both German and English.

Mixing languages does not seem to hold bilingual children back from learning both languages, but it takes longer to learn two languages than to learn one. While there (vii) (to be) a tendency on the whole for bilinguals to lag behind monolinguals in their language development, this isn't true for all children. Scientists (viii) (to now start) to unravel the mysteries of the bilingual brain and shed light on the advantages that this skill may bring.

1. Change the verbs numbered (i) – (viii) in the passage above into the correct verb tense. (8)

2. Identify whether the sentences below are in the active or passive voice: (3)

- (i) Gone are the days when using a second language in the home was frowned upon.
- (ii) Newborns are developing vocabulary in two languages without becoming confused.
- (iii) Children will choose the correct language to communicate with a particular individual.

3. Write the sentences in question 2 above in the opposite voice. (3)

4. Write the following sentence in reported speech.

Professor Bialystok said: "We conducted a study a few years ago to analyse the recovery of bilinguals after suffering a stroke." (3)

5.1 Identify the type of conditional used in the following sentence. (1)

If children master two languages, it improves their cognitive reserves.

5.2 Change the sentence at 5.1 above into a second conditional sentence. (2)

5.3. Change the following sentence into a third conditional and then complete it with a suitable result clause. (2)

If more parents change their attitudes towards bilingualism, .....

6. From the last paragraph in the passage above, identify and write down one example of each of the following: (3)

- (i) gerund
- (ii) present participle
- (iii) infinitive

**Section C: Critical Reading and Summarising**  
**Part 1: Critical Reading**

**[20]**  
**[10]**

**Read the text below and then answer the questions that follow by choosing the option that best answers each of the questions. Write only the letter of your choice in the answer book.**

Jim Hansen, a climatologist at NASA's Goddard Space Institute, is convinced that the earth's temperature is rising and places the blame on the build-up of greenhouse (5) gases in the atmosphere. Unconvinced, John Sununu, former White House chief of staff, doubts that the warming will be great enough to produce a serious threat and fears that measures to reduce the emissions (10) would throw a wrench into the gears that drive the United States' troubled economy. The stakes in this debate are extremely high, for it pits society's short-term well-being against the future of all the (15) planet's inhabitants.

Our past transgressions have altered major portions of the earth's surface, but the effects have been limited. Now we can foresee the possibility that to satisfy the energy needs of an expanding (20) human population, we will rapidly change the climate of the entire planet, with consequences for even the most remote and unspoiled regions of the globe. The notion that certain gases could warm (25) the planet is not new. In 1896 Svante Arrhenius, a Swedish chemist, resolved the long-standing question of how the earth's atmosphere could maintain the planet's relatively warm temperature when the oxygen (30) and nitrogen that make up 99 percent of the atmosphere do not absorb any of the heat escaping as infrared radiation from the earth's surface into space. He discovered that even the small amounts of carbon (35) dioxide in the atmosphere could absorb large amounts of heat.

Furthermore, he reasoned that the burning of coal, oil, and natural gas could eventually release enough carbon dioxide to warm the earth. Hansen (40) and most other climatologists agree that enough greenhouse gases have accumulated in the atmosphere to make Arrhenius's prediction come true. Burning fossil fuels is not the only problem; a fifth (45) of our emissions of carbon dioxide now come from clearing and burning forests. Scientists are also tracking a host of other greenhouse gases that emanate from a variety of human activities; the warming effect (50) of methane, chlorofluorocarbons, and nitrous oxide combined equals that of carbon dioxide. Although the current warming from these gases may be difficult to detect against the (55) background noise of natural climate variation, most climatologists are certain that as the gases continue to accumulate, increases in the earth's temperature will become evident even to skeptics. The battle lines for (60) this particular skirmish are surprisingly well balanced. Those with concerns about global warming point to the recent report from the United Nations Intergovernmental Plan on Climate Change, which suggests (65) that with "business as usual," emissions of carbon dioxide by the year 2025 will be 25 percent greater than previously estimated.

On the other side, the George C. Marshall Institute, a conservative think tank, (70) published a report warning that without greenhouse gases to warm things up, the world would become cool in the next century. Stephen Schneider, a leading computer modeler of future climate change, accused (75) Sununu of "brandishing the [Marshall] report as if he were holding a crucifix to repel a vampire. If the reality of global warming were put on trial, each side would have trouble making (80) its case. Jim Hansen's side could not prove beyond a reasonable doubt that carbon dioxide and the other greenhouse gases have warmed the planet. But neither could John Sununu's side prove beyond a reasonable (85) doubt that the warming expected from greenhouse gases has not occurred.

**1. In the first paragraph in line 13, the word “pits” means (2)**

- A. removes the core of.
- B. sets in competition.
- C. depresses.
- D. marks with small scars.
- E. hardens.

**2. From the information in the second paragraph of the passage, you can infer that a planet (2)**

- A. whose atmosphere was made up entirely of oxygen would be warmer than a planet equally distant from the sun with an atmosphere made up entirely of nitrogen.
- B. whose atmosphere was made up entirely of nitrogen would be warmer than a planet equally distant from the sun with an atmosphere made up entirely of oxygen.
- C. with a larger amount of carbon dioxide in its atmosphere, other factors being equal, will be warmer than a planet with less carbon dioxide. (2)
- D. with a small amount of carbon dioxide in its atmosphere cannot increase this amount.
- E. with little infrared radiation escaping from its surface is likely to be extremely cold.

**3. From the passage, it can be inferred that all the following are greenhouse gases EXCEPT: (2)**

- A. nitrogen.
- B. carbon dioxide.
- C. methane.
- D. chlorofluorocarbons.
- E. nitrous oxide.

**4. Which of the following, if true, would call into question the argument of the Marshall report? (2)**

- I. Since the earth’s climate did not grow colder in the five hundred years since 1400 when the amount of greenhouse gases released by humans was small, there is no reason to expect a decrease in temperature when the amounts of gas released are now much larger.
  - II. The radical reduction of the emission of greenhouse gases will result in massive unemployment throughout the industrial world.
  - III. Some scientific studies have shown that the temperature of the earth is unaffected by the presence of oxygen in the atmosphere.
- A. I only
  - B. II only
  - C. I and II only
  - D. I and III only
  - E. I, II, and III

**5. The word “skeptics” in line 59 most nearly means. (2)**

- A. scientists.
- B. ecologists.
- C. opponents.
- D. doubters.
- E. politicians.

**Part 2: Summarising (10)**

Briefly summarise the author’s purpose of writing the passage, the effect of the final paragraph and what the passage implies about what a greenhouse gas is: Keep your summary to **100 words** and note that **the part that exceeds the word limit will not be marked**. Indicate the number of words used.



**Section D: Essay writing**

**[30]**

**Choose one of the topics below and write either an Opinion or an argumentative essay of 300 to 350 words on it.**

1. The technological revolution that was heralded by social media has radically changed the way we work and play. Mention three things that social media improved in our daily lives.
2. Some people regard wealth as the pinnacle of success while others see happiness as more important. Argue for and against whether wealth is more important than happiness.
3. Many universities (including NUST) have allowed students to go back to classes. What is your opinion on this situation given the high risk a possible return to classes will pose to both students and staff given the steadily increasing Covid cases?
4. If you were elected to represent the youth on the Windhoek City Council, which are the three key issues relating to youth upliftment will you address.
5. Namibia is experiencing a rise in human-wildlife conflict due to the increasing number of animals like elephants. The Namibian government recently sold elephants to the United Arab Emirates. Argue for and against the sale of Namibian elephants to foreign countries.