

**BACCALAUREAT « C-D »**

*SESSION 2000*

**Section I: Vocabulary 10 marks**

*A. Read the following passage and fill in the blanks. (5 marks)*

Many of the diseases that we suffer from are aggravated by our lifestyles. But some diseases are..... that is we get them from our .....because they are in the family. Smoking and eating fat foods place the .....of your heart at risk. People who work hard should have enough and..... relaxation. Smoking is terrible for the heart because the..... in the cigarettes increases the.....of times the heart heats, that is the pulse..... and this raises the pressure. If you stop smoking, you'll suffer..... colds and infection and you'll..... your money!

You don't have to be a scientist to know how to adopt a clean lifestyle that will protect your health.

*B. Give the opposites of the words underlined in the following sentences. Write in the spaces provided. (5 marks)*

1. The evidence that we got from the experiments contradicted the theory .....
2. The supporters of our Party attended the political rally .....
3. He turned down my invitation to the dinner and went to a restaurant .....
4. He fell out with his friend and they are not on speaking terms any more .....
5. Scientists are supposed to be hard working and reliable .....

**Section II: Grammar: 10 marks.**

*1. Complete the following conversation that you overheard between two scientists talking about their work. They do not agree on whether the experiments that they are about to work on are ethical or not.*

Erick: I think we should carry on the experiment although there are many people who think it is immoral.

Jones:.....

Erick: No. I do not think it is important to worry about what people say.

Jones:.....

Erick: But everybody says the cloning of animals is against the laws of God.

Jones:.....

Erick: No I do not agree with you. Religion and Science cannot be separated.

Jones:.....

Erick: No it is not true that the best scientists have been atheists.

Jones: Oh, well. I do not think we can agree over this. Do you still want to work with me?

Erick:.....

**2. Complete the following sentences with the appropriate words or expressions.**

- a) You bring..... your umbrella to the concert. The weather forecast predicted a dry evening.
- b) Your parents..... you so much money for a short holiday in the village! I can't believe it. They are so extravagant!!
- c) I couldn't talk to either Mafany or his wife..... of them had gone out.
- d) My friend is still very sad. He has not got the death of his favourite musician. ....  
the soothsayer says, I cannot believe him because I believe in God.

**Section III: Comprehension 10 marks.**

*Read the following passage carefully and answer the questions below it. It is important to read the questions and understand them*

**The sperm that never dies**

There are many advances in science almost everyday and some of them have obvious pleasant consequences for mankind. However, it is not always easy to make up one's mind about the usefulness of other scientific work.

Imagine a mouse impregnating a cat or a bull impregnating a horse or worse still, an elephant impregnating a deer. Can you imagine a man fathering a child or one hundred children a century after his death? This may sound preposterous or quite stupid but a team of researchers in the University of Pennsylvania in the United States of America have reported that they have made scientific progress. They claim that they have frozen spermatogonial stem cells, these are the cells that make sperm, defrosted them and brought them back to life. They have also claimed that they have taken stem cells from rats and implanted them in mice, which have then produced fully functional rat sperm.

The first experiment is, by itself, something of a reproductive achievement. Being able to keep the cells on ice is thus a lot more useful than the already common practice of freezing sperm itself, sperm lasts only so long, but a sperm factory can, in theory, go on forever. That could be comforting to men about to undergo, say, radiation treatment or chemotherapy, which can destroy stem cells and render patients permanently infertile. These men may avoid this problem by having their stem cells removed, frozen and re-implanted after treatment.

Stem cells can give rise to new stem cells which can then be harvested and frozen in turn. As a result, says Pennsylvania veterinary physiologist Ralph Brinster, a co-author of both studies, "we can make any individual male biologically immortal".

The second experiment is equally interesting. If rat stems can produce rat sperm while living in a mouse's testicles, then it is plausible that any mammalian species can play host to the stem cells of any other. This, for example, could help biologists to preserve the genetic materials from endangered species. However the possibility of abuse is always there. Imagine that some women may want to have sperms generated by the stem cells of one of their idols. Or that some racists or crazy politicians may want to dictate the type of stem cells to be imposed on people. The dangers are endless. And it is difficult to predict what the future holds in store if there is a free for all.

**(Culled and adapted from *Time Magazine* June 10 1996)**

## **Questions**

1. What scientific innovation have researchers in Pennsylvania achieved? (1 mark)
2. How were sperms preserved before stem cells were used? (1 mark)
3. Explain what Ralph Brinster means by saying 'we can make individual male biologically immortal' (2 marks)
4. How can environmentalists benefit from this new advance in science? (2 marks)
5. Stem cells are more reliable for reproductive regeneration than sperms. True or false? (2 marks) Justify your opinion.
6. Do you think scientists should be allowed to carry out experiments which can lead to changes in the way the human body functions? Justify your opinion. (2 marks)

**Section 1V: Essay: 10 marks**

*Write an essay of between 225 and 250 words on anyone of the following topics.*

- A. Describe a day in the life of a professional that you aspire to become. Imagine some of the successes and difficulties that you have encountered.
- B. You are a careers counsellor for young students. Write a talk you are going to give on the importance of a chosen career.
- C. Imagine that you are the mother of a young girl. She is about to choose a career. Write a letter to her, advising her on a career that will be useful to her as a person, a mother and a member of the family. Your name is Veronique Tenejou and your address is P0 Box 65 Fouban and your daughter is in Lycée de Deido, Douala.