COLLEGE OF SOCIAL SCIENCES, THEOLOGY, HUMANITIES & EDUCATION

HMU1103: ENGLISH AS A SECOND LANGUAGE I

END OF FIRST SEMESTER EXAMINATIONS

NOVEMBER/DECEMBER 2025

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DURATION: 3 HRS

INSTRUCTIONS

1. This paper contains **THREE** sections (Sections A, B and C).
2. Section A is on **Academic Writing** (Essay)
3. Answer **ALL** questions from Section B.
4. Answer **ALL** questions from Section C.
5. Start each question on a new page in your booklet.
6. Credit will be awarded for logical, systematic and neat presentation
7. Do not repeat material.

Section A: Essay (30 marks)

Instructions

a. Choose **ONE** topic from **question 1** and write an essay on it.
b. Credit will be given for good English expression, clear organization and originality of ideas.
c. Your essay should be approximately 400 words.
d. Write legibly.

Question 1

a. It has been said, "Not everything that is learned is contained in books." Compare and contrast knowledge gained from experience with knowledge gained from books. In your opinion, which source is more important? Why?

b. Discus the importance of role models in shaping your future ambitions

c. Discuss the relationship between mental health and the pressures of modern day life.

d. Reflect on something that someone has done for you that has made you happy or thankful in a surprising way. How has this gratitude affected or motivated you?

e. Explain how you plan to give back to your community in your future career

f. Analyze the role of the church and church leaders in promoting social change and social justice

f. Assess the importance of preserving a country's historical monuments.

g. Examine the impact of Artificial Intelligence on the job market.

h. "Governments should be allowed to spy on your internet activities in the name of counter terrorism". To what extend do you agree with this view?

i. Discuss the impact of Social Media in dissemination of information. In your response, analyze the factors that contribute to online harassment and cyberbullying

Section B: Reading Comprehension [40 marks].

Instructions

1. Read the following passage and answer **ALL** the questions at the end of the passage.
2. Do not copy out the question
3. Your responses should be precise and concise (*brief, clear, to the point)*
4. Write all answers in your Examination Booklet, clearly numbering the answers.
5. Write legibly.

AEROPONICS: FEEDING TOMORROW'S WORLD?

If our world is to survive for much longer, we have no choice but to reduce the use of natural resources and cut out wastage. Compared to traditional agriculture, **aeroponics** does both.

The world's population is expected to continue growing until the end of the twenty- first century: that at least was the general **consensus** of experts until 2019. Maybe in the new post-Covid reality, the rate of growth will slow down; but even so, unless Covid-19 or some other new virus causes millions more deaths than **initially** predicted, the world's population will continue to grow, putting ever-increasing pressure on the natural environment, on resources, on living space, and most critically on food and water. Aeroponics will be part of the solution.

According to a United Nations FAO report published in 2011, almost half of the fruit and vegetables produced in the world go to waste – they never get consumed by the humans for whom they are grown. Wastage occurs throughout the production and distribution cycle, during production, during transformation, during transportation, and even – notably in developed economies – after purchase by the final customer. Fifty percent of all fruit and vegetables going to waste, that is an enormous amount of wastage, and not just in economic terms. This wastage has a huge **impact** in terms of natural resources, particularly space and water, which in turn have huge **implications** for the global environment. Cutting out all waste in the production and distribution of food is an impossible **goal.** Even people living in small eco-sustainable communities generate waste. Even in organic crop production, pests and disease cause wastage; and even if harvested and distributed locally, part of a crop will always be wasted. But there is a large difference between wasting fifty percent of all fruit and vegetables produced worldwide, and the unreachable goal of **achieving** no waste at all. Between 50% and zero, there is plenty of **scope** for significantly reducing the volume of food waste worldwide simply through the use of new more efficient production methods.

Studies have shown that packaging and distribution systems account for about 25% of total wastage of fresh fruit and vegetables, leaving plenty of opportunity for improvement. In an ideal world, and as in the past, much of the food consumed in cities would be produced locally, not **shipped** thousands of miles as happens today. In 1998, the US Department of Agriculture released a study into fruit and vegetables arriving at the Chicago Terminal Market, the main point of distribution for the American Middle West. The report showed that basic vegetables including lettuce, broccoli, peas or cauliflowers all traveled over 2000 miles (over 3000 km) before reaching the market and *before* being shipped on to supermarkets across the region. Yet Chicago is in the heart of a massive agricultural area. Granted it can get pretty cold in winter, but with modern agricultural techniques, the Midwest could be **self-sufficient** for many types of fruit and vegetables, cutting out the massive environmental cost of shipping tons of vegetables half way across a continent.

Since 2011, Chicago's O'Hare airport has been home to an aeroponic garden where people can see how vegetables can be grown in an environment that is not only without soil but even without any permanent **medium** in which to grow. In this experimental garden, plants are grown, as the name suggests, ... in the air, their roots hanging down in nothing. **Hydro**ponics,

growing plants in troughs of nutrient-rich water, has been developing since the 1970's. **Aero**ponics takes things one step further, by removing the water and replacing it with air. Not just air, obviously; while plants are grown with roots hanging in the air, these roots are regularly sprayed with a nutrient-rich solution that gives them just what they need for optimum growth. It's very high-tech, it's not cheap, and it's a long way from currently popular organic farming techniques. Yet in many ways, aeroponics is actually more environment-friendly than even the most strictly managed traditional organic farming methods. And it's **down to** one factor: waste.

Traditional farming is wasteful; modern intensive agriculture **relies on** large inputs of external resources, notably heat, water and nutrients. The vast amounts of water used by agriculture are already causing serious problems in many parts of the world; beneath California's San Joaquim Valley, the world's most productive agricultural area, water tables have been dropping for almost a century, and scientists estimate that the land not the water table below it has sunk by over 8 metres in some parts. NASA calculates that Southern California had a "water deficit" of 4.2 gigatons per year from 2002 to 2015. Aeroponic agriculture reduces water waste to zero. The only water used is what is actually taken up by the roots of plants when they are sprayed. Any water not used can be collected and reused.

The same goes for nutrients; in traditional agriculture, plants only extract a small proportion of nutrients from the ground, and good ground will have many nutrients in it that will not be used at all by the crops grown on it. In an age of diminishing natural resources, traditional agriculture uses millions of tons of chemical fertilizer each year, much of which goes to waste. In Brittany, France, many streams and beaches have been seriously polluted by nutrient-rich water running off fields, causing "algal bloom" along the seashore and covering some beaches in green slime. With aeroponic agriculture, no nutrients are lost, so there is no risk of unintended pollution. One big advantage of traditional agriculture is that it almost always uses natural heat and light, even if under glass or plastic. Aeroponic agriculture, by contrast, may require artificial heat and light, especially if practiced indoors. But with the development of small-scale locally-sited renewable energy production, and highly energy-efficient buildings and lighting systems, large-scale indoor aeroponic vegetable growing units **are liable to be** a feature of tomorrow's cities.

If all the lettuces consumed in Chicago in winter could be grown locally, in carbon-neutral zero-waste aeroponic "farms", instead of being brought in by truck from California, that in itself would lead to a huge reduction in the use of water, minerals, land-space and transportation costs. Reproduced on a global scale, reduced use of natural resources will be **vital** for ensuring a sustainable future for generations to come, even when the global population goes above 100 billion.

Questions

1. What was the general consensus of experts about world population growth until 2019?

[2 marks]

2. According to the United Nations FAO report from 2011, what proportion of fruit and vegetables are wasted worldwide? [2 marks]

3. Where does food wastage occur during the production and distribution cycle? [2 marks]

4. What distinguishes aeroponics from hydroponics in terms of the growth environment for plants? [2 marks]

5. How does aeroponic farming potentially reduce environmental pollution compared to traditional farming? [2 marks]

6.What can be inferred about the potential impact of reducing food wastage on global food security and environmental sustainability? [5 marks]

7. Why might aeroponics be considered more environmentally friendly despite requiring artificial heat and light? [5 marks]

8. Based on the information provided, what implications can be drawn regarding the environmental benefits of aeroponic agriculture compared to traditional farming methods?

[5 marks]

9.What inference can be made about the environmental impact of shipping vegetables thousands of kilometres or miles? [5marks]

10. Are there potential social or cultural barriers to the widespread acceptance of aeroponic farming implied in the passage? [5 marks]

11. How convincing is the passage's claim that food waste accounts for almost half of all fruit and vegetables produced globally? [5 marks]

Section C: Contextual Meaning

Part 1: [20 marks]

(i) The following words and expressions are used in the passage. Choose the correct meaning of each expression from the options given.

For example:

Consensus

A. *disagreement*
B. *verbal attack*
C. *general agreement*

Answer (0). C

Now, do the following exercise:

(0) Do not copy out the sentences.
(1) In your answer booklet, write the question number and against it the letter (A, B or C) most suitable meaning

(i) **goal**

A. game
B. result

C. objective

(ii) **initially predicted**
A. historically stated
B. originally stated
C. later stated

(iii) **impact**
A. cause
B. damage
C. effect

(iv) **implication for**
A. consequences
B. agreements
C. results

(v) **Achieving**
A. reaching
B. finishing
C. doing better than

(vi) shipped
A. transported
B. sent by ship
C. carried by plane

(vii) **down to**
A. less than
B. due to
C. worse than

(viii) to rely on
A. to be connected to
B. to produce
C. to depend on

(ix) are liable to
A. are likely to
B. are expected to
C. are going to

(x) vital
A. **negative**
B. **crucial**
C. **relegated**

Part II [10 marks]

Explain in your own words the meaning of any **five [5]** of the following **compound noun** groups taken from the reading comprehension passage:

(a) Eco-sustainable communities _____
(b) currently popular organic farming techniques _____
(c) a water deficient_____
(d) small-scale locally-sited renewable energy production _____
(e) highly energy-efficient buildings and lighting systems _____

(f) large-scale indoor aeroponic vegetable growing units _____
(g) carbon-neutral zero-waste aeroponic "farms"

END OF PAPER