



**UTM**  
UNIVERSITI TEKNOLOGI MALAYSIA

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**FINAL EXAMINATION SEMESTER II  
2010/2011 SESSION**

**COURSE CODE** : UHB 1412  
**COURSE** : ENGLISH FOR ACADEMIC  
COMMUNICATION  
**NAME** : \_\_\_\_\_  
**MATRIC NUMBER** : \_\_\_\_\_  
**COURSE/SECTION NUMBER** : \_\_\_\_\_  
**NAME OF LECTURER** : \_\_\_\_\_  
**DURATION** : 2 HOURS  
**DATE** : APRIL 2011  
**MARKS** : 40

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**INSTRUCTIONS TO CANDIDATES:**

There are two (2) sections in this paper:

Section A : Reading (30 marks)  
Section B : Writing (10 marks)

Answer ALL questions in the space provided in this question booklet.

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**THIS EXAMINATION PAPER CONSISTS OF 11 PRINTED PAGES  
(INCLUDING THIS PAGE).**

## SECTION A – READING (30 marks)

This section contains two (2) texts:

### Text 1

Read the text and answer all questions that follow.

- I Organic farming is a branch of agriculture used to produce crops by controlling pests and by using mechanical cultivation. This type of farming increases the fertility of soil and the production of crops without using any kind of artificial fertilizers and insecticides or fungicides. It not only produces crops which are independent of artificial fertilizers, but also enhances the rate of productivity with the help of natural resources. The yields produced by organic farming methods are often smaller than that of conventional farming. However, conventional farming, with its heavy use of manufactured fertilizers and pesticides, has a greater negative effect on the environment. In comparison, organic farming produces healthy crops while enhancing the quality of the soil and surrounding environment.
- II One way how organic farming enhances the life of the soil is by adopting wide and varied crop rotations to break weed and pest cycles, allow soil recovery time and add useful nutrients. Crop rotations can also improve soil structure and fertility by alternating deep-rooted and shallow-rooted plants. Organic farmers usually grow legumes in rotation with other crops. Legumes such as clover, for example, “fix” nitrogen from the atmosphere. Another common practice by organic farmers is planting and retaining hedges and meadows to prevent soil erosion and nutrient loss. In addition, farmers use green manure to replenish the lost nutrients of the soil. Feeding the soil with manure or compost feeds the whole variety of life in the soil which then turns this material into food for plant growth. This practice not only adds nutrients and organic matter to the soil but can help prolong its life.
- III In addition, organic farming attracts a wide range of organisms. Studies show that nearly all non-crop species prefer organic farming both by abundance and diversity where an average of 30 percent more species inhabits organic farms. Birds, butterflies, soil microbes, beetles, earthworms, spiders, vegetation, and mammals are particularly attracted to organic farms. Lack of herbicides and pesticides improve biodiversity fitness and population density. Many weed species attract useful insects that improve soil qualities and forage on weed pests. Soil-bound organisms often benefit because of

increased bacteria populations due to the use of natural fertilizer such as manure. Increased biodiversity, especially from soil microbes and mycorrhizae have been proposed as an explanation for the high yields experienced by some organic plots. Biodiversity from organic farming can be beneficial to humans too. Species found in organic farms enhance sustainability of the soil by reducing human input like using fertilizers and pesticides. Farmers that practice organic methods reduce risks of poor yields by promoting biodiversity. Common game birds such as the ring-necked pheasant and the northern bobwhite often reside in agriculture landscapes, and benefit recreational hunters.

- IV Organic techniques do not expose food producers to dangerous pesticides and other dangerous chemicals. In conventional farming, however, food producers usually use pesticides and fungicides to maintain good yields. There is a growing concern that the use of these chemical ingredients may cause food contamination. Even when they are used properly, the chemicals may still end up in the bodies of farmers and food handlers. Exposure to organophosphate pesticides, Chlorpyrifos which contains neurotoxic compounds, may increase the risk of developing Parkinson's disease. Chlorpyrifos is commonly used in conventional farms, thus, farmers who have direct contact with this pesticide can be consistently exposed. Propargite, a highly toxic pesticide, is believed to be carcinogenic, capable of causing cancer. This is a pesticide widely used by farmers to control mites on a range of fruit, grain, vegetable, nut and fiber crops.
- V There is no doubt that conventional method of farming helps to produce food faster and in abundance. Yet very often the produce is full of chemicals and pesticides which eventually have adverse effects on human and animal health as well as the health of the soil. Organic farming came into being due to the shortcomings of conventional farming. Advocates of eco-friendly agriculture are working aggressively to convince major food producers to adopt organic farming more extensively. Several movements are making concerted efforts to promote and bring changes in the policies favouring organic agriculture. These include formation of organic farmer's groups, promotion of successful farming techniques amongst farmers, marketing promotion for organic products and protection of organic farmers' rights to develop and sell seeds.

Adapted from:  
[www.small-farm-permaculture-and-sustainable-living.com/](http://www.small-farm-permaculture-and-sustainable-living.com/)

1. Match each main idea below with its paragraph. Write the number of the paragraph on the line provided.

- (a) \_\_\_\_\_: Artificial pesticides can bring adverse effects to humans.  
(b) \_\_\_\_\_: Biodiversity benefits humans and organisms.  
(c) \_\_\_\_\_: Organic farming practices can help prolong the life of the soil.  
(d) \_\_\_\_\_: Attempts are being made to expand organic farming.  
(e) \_\_\_\_\_: Organic farming is more environmental-friendly than conventional farming.

(5 x 1m = 5 marks)

2. Find **ONE** word in the text which is a synonym of the following words. The number in parenthesis refers to the paragraph where the answer/word can be found.

- (a) farming (paragraph I) \_\_\_\_\_  
(b) alternations (paragraph II) \_\_\_\_\_  
(c) replace (paragraph II) \_\_\_\_\_  
(d) on-going maintenance (paragraph III) \_\_\_\_\_  
(e) produce, harvest (paragraph IV) \_\_\_\_\_  
(f) drawbacks, weaknesses (paragraph V) \_\_\_\_\_

(6 x 1m = 6 marks)

3. Explain two ways to achieve soil fertility in organic farms.

- (a) \_\_\_\_\_  
\_\_\_\_\_  
(b) \_\_\_\_\_  
\_\_\_\_\_

(2 x 1m = 2 marks)

4. How does organic farming promote biodiversity?

- (a) \_\_\_\_\_  
\_\_\_\_\_  
(b) \_\_\_\_\_  
\_\_\_\_\_  
(c) \_\_\_\_\_  
\_\_\_\_\_

(3 x 1m = 3 marks)

5. To what extent does conventional farming affect human health?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(2 marks)

6. List four actions taken to encourage organic farming.

- (a) \_\_\_\_\_  
(b) \_\_\_\_\_  
(c) \_\_\_\_\_  
(d) \_\_\_\_\_

(4 x 1/2m = 2 marks)

## Text 2

Read the text and complete the task that follows.

- I Organic clothes, organic food, organic cleaning products - the word "organic" seems to be the hottest trend right now. However, before any consumer jumps on the organic bandwagon, it is important to identify the pros and cons of purchasing and consuming organic foods. There are many strong arguments in defending the purchase and consumption of organic food products. Organic farming does not pose the threat of pesticide and chemical run-off which could cause contamination of watersheds and drinking water, while many traditional modern farming methods do just that. Organic farms also tend to maintain richer, more sustainable soil through the use of cover crops, crop rotations and composts. These organic farming methods have proven to slowdown soil erosion and vary the nutrient demands on the soil.
- II Studies show that organic foods hold more nutritional value and micronutrients than non-organic foods. The nutritional benefits from organic foods include higher levels of vitamins A, B, C, E, elements such as zinc and minerals such as calcium. Organic foods also do not carry the risk of some health complications linked to pesticides and antibiotics. Furthermore organic foods contain lower levels of heavy metals and have virtually no hydrogenated fat which has been linked to heart disease, whereas non-organic processed food can contain both.
- III Are organic foods safer than conventional foods? Despite the increased nutritional value of organic foods, there are some cons to consuming organic foods. Not only can organic foods be more expensive than conventional foods, they can be contaminated with bacteria and pesticides. A US popular television program reported finding higher concentrations of bacteria on organic produce than on conventional produce. Organic foods can be contaminated with Salmonella, Listeria monocytogenes, or E. coli. Animal waste or manure is used as a fertilizer instead of synthetic chemicals on organic foods. The manure used in organic compost may be more harmful than the health risks related to pesticides and chemicals used on non-organic farms. Manure often contains E. coli bacterium, which can spread harmful animal diseases to humans. Although the manure is composted to kill the bacteria, uncertified farmers may not always follow the proper procedure.

- IV Many consumers buy organic foods because they think that these foods are pesticide free, but this may not be always true. Organic farmers can use natural pesticides such as sulfur, copper, nicotine, and plant extracts. Synthetic pesticides can also be found on organic foods. Synthetic pesticides can be carried by wind, ground water, rain, or soil from other farms to organic farms and contaminate the organic foods being grown there. Eighty-nine to ninety percent of all pesticides drift from their point of application, which increases the risk of nearby areas being exposed. In addition, synthetic pesticides used before may not have disappeared from the soil and therefore can contaminate organic crops.
- V Organic food items tend to be much more expensive than non-organic produce. In fact, they can be anywhere up to three or four times more expensive due to limited supply, special handling, and required certification. All organic foods must be produced without synthetic pesticides and genetic engineering. The use of sewage sludge as fertilizer and irradiating food to preserve it will be banned also. In addition, the use of hormones and antibiotics in organic meat and dairy products is prohibited. Not using these technologies makes organic farming more labour intensive, therefore making organic foods more expensive.
- VI Clearly, there are a range of factors to consider when weighing up whether or not to choose organic produce and include it in our diet to a greater extent. Organic foods are not any safer than conventional foods. They still can contain bacteria and pesticides, and are no more nutritious or delicious than conventional foods. Yet consumers are still willing to spend nearly twice as much on organic foods. Consumers should stay abreast of the latest reports and research and choose items that concur with their lifestyle philosophies and health aims. If one wants to buy foods that are more environmentally friendly, then organic foods would be a good choice. However, if one is looking for immediate health benefits, organic foods might not be the answer. An apple is an apple, whether it is organic or not, and people should not have to pay twice as much for peace of mind.

Adapted from:  
Pros, Cons of Organic Foods. [ezinearticles.com/](http://ezinearticles.com/)

Based on Text 2, prepare notes on the **Pros and Cons of Organic Farming**.

(10 marks)



### SECTION B- ESSAY (10 marks)

Write a four- to six-paragraph essay on ‘**Is Organic Farming Necessarily Better?**’. You may refer to Text 1 and Text 2 to support your points.

Note: Marks will be deducted for direct lifting of sentences from the texts.

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