

FINAL EXAMINATION
SEMESTER II, ACADEMIC SESSION 2005/2006

DATE : APRIL 2006

TIME : 2 HOURS

UBE2112

ENGLISH FOR SCIENCE AND TECHNOLOGY 1
(BAHASA INGGERIS SAINS DAN TEKNOLOGI I)

INSTRUCTIONS TO CANDIDATES:

1. This paper contains three sections - **Section A**, **Section B** and **Section C**
2. Answer **ALL** questions in this questions booklet
3. Candidates are **not allowed** to bring any materials except stationeries into the examination hall without prior permission.
4. Write down your particulars in the Borang H provided.
5. Candidates are **not allowed** to take question papers out of the examination hall.

Name : _____

Matric No : _____ Group : _____

Lecturer : _____

DO NOT OPEN THIS QUESTION BOOKLET UNTIL YOU ARE TOLD TO DO SO

This question booklet has **nine (9)** printed pages excluding this cover page

SECTION A – COMPREHENSION SECTION

Reading the following passage and answer the questions below.

With the invention of polymers, chemists gave us plastic, **an almost ideal material**. As a consumer product, plastic is strong, versatile and durable. It can hold up under heat and pressure and can be subjected to total submersion in water (even ocean water) and not be affected. You can even leave it outside and it remains as good as new, despite the weather. Unlike most other materials, plastics don't naturally **decay**.

For useful consumer products, this remarkable durability is a blessing. Plastic bottles are light and unbreakable; plastic bags don't leak or tear as easily as paper bags do. But when these items are ready for the garbage, it's an environmental nightmare! Millions of tons of plastic garbage litter our highways and beaches.

Plastic trash even affects marine life in the oceans. According to the National Academy of Sciences, more than 600,000 plastic containers and bags are tossed into the ocean everyday. Fishermen lose or discard an estimated 150,000 tons of plastic fishing gear every year. At least forty-two species of seabirds are known to snack on plastic, **a habit that is often fatal**. In addition, tens of thousands of seals, sea lions and turtles die each year after becoming entangled in bits of fish netting.

What should we do with the hundreds of millions of tons of plastic and other polymer products that end up in the garbage each? We could burn it. However, that creates a thick, black smoke that is not only intolerable but also a dangerous form of air pollution. We could bury it but solid waste dumps pose their own pollution problem. Too often, trash in the dumps is not buried for a long period of time and becomes an eyesore and a health hazard for birds and other land mammals, including nearby human residents. What's more, highly populated countries with limited space may find that land is far too valuable to be used as a dump site.

Obviously, a large scale solution to the plastic trash problem is not yet in sight. However, individuals can help by keeping some of that plastic out of the garbage for as long as possible. For example, people who get plastic bags from the grocery store could save them and re-use them. Some people may choose not to buy plastic products when the same item is available in paper or glass. Of course, these are only small steps, but **they** eventually are part of a larger solution.

(Source: GED Test 3: Science)

1. Why is plastic considered as "an almost ideal material"?
 - A plastic is the best material ever invented
 - B plastic is a popular consumer product
 - C despite its many good qualities, plastic has its own drawbacks
 - D despite its many good qualities, plastic is littered everywhere

2. According to the passage, the characteristics of plastic include :
- I last for a long time
 - II heat resistant
 - III water resistant
 - IV easily available
- A I, II
B I, II, IV
C II, III, IV
D I, II, III
3. What is the main property of plastic that makes it such an environmental concern?
- A its resistance to weathering and decay
 - B the ease with which it can be broken
 - C its use in a wide range of consumer products
 - D it can be manufactures anywhere in the world
4. What are the bad causes of dumping plastic at solid waste dump-sites?
- I create air pollution
 - II becomes an eyesore
 - III health hazard for birds
 - IV health hazard for humans
- A I, II
B I, II, IV
C II, III, IV
D I, II, III
5. According to the passage, individuals can help reduce plastic trash by
- I recycling plastic items
 - II storing plastic items at home
 - III not using plastic at all
 - IV buying non-plastic alternatives
- A I, II
B I, II, IV
C I, IV
D I, II, III, IV

6. The following are the four methods of disposing plastic trash
- I dumping it in the ocean miles from shore
 - II recycling plastic consumer products
 - III burning plastic trash at the solid waste dump
 - IV burying plastic trash in regulated solid waste dump

Which of the method will contribute to pollution?

- A II, III
 - B III, IV
 - C I, III
 - D I, II, III
7. Another word for 'decay' is
- A dispose
 - B dissolve
 - C decompose
 - D destroy
8. What does the phrase "a habit that is often fatal" refer to :
- A injury
 - B death
 - C paralysis
 - D lower quality of life
9. What does 'they' refer to?
- A people using other alternative products
 - B plastic products that are reused
 - C small steps to conserve environment
 - D plastic bags from the grocery stores

(9 marks)

SECTION B – GRAMMAR SECTION

1. Read the following paragraphs and identify the correct tenses in the appropriate blanks

A brief history of artificial intelligence

<p>We live in the era of knowledge revolution, when the power of a nation determined not by the number of soldiers in its army but the knowledge it (10) is possessed. Science, medicine, engineering and business propel nations towards a higher quality of life, but they also (11) are required highly qualified and skillful people. At present, we (12) are adopted intelligent machines that can capture the expertise of such knowledgeable people and reason in a manner similar to humans.</p> <p>The desire of intelligent machines was just an elusive dream until the first computer (13) developed. They early computers could manipulate large databases effectively by following prescribed algorithms, but could not reason about the information (14) is provided. This gave rise to the rise to the question of whether computers could ever think. The intelligent behaviour of a computer (15) was defining by Alan Turing as the ability to achieve human-level performance in a cognitive task. The Turing test (16) is provided a basis for the validation and verification of knowledge based systems. In 1956, a summer workshop at Dartmouth College brought together ten researchers interested in the study of machine intelligence, and a new science-artificial intelligence (AI) was born</p> <p>Since then, AI technology (17) has been developed from the curiosity of a few researchers to a valuable tool to support humans making decisions. The historical cycles of AI (18) are included the era of great ideas and great expectations in the 1960s, to the development of the first expert systems such as MYCIN in the 1970 to the maturity of system technology and its massive application in different areas in 1980s and 1990s.</p> <p>The development of expert systems (19) is created knowledge engineering, the process of building intelligent systems. Although it is still an art rather than engineering, attempts (20) have already made to extract rules automatically from numerical data through data network technology.</p>	<p>Eg : is determined</p> <p>10. _____</p> <p>11. _____</p> <p>12. _____</p> <p>13. _____</p> <p>14. _____</p> <p>15. _____</p> <p>16. _____</p> <p>17. _____</p> <p>18. _____</p> <p>19. _____</p> <p>20. _____</p>
--	--

Source: Artificial Intelligent –A Guide to Intelligent Systems
(11 marks)

2. Study the table and diagrams below, use the information to write sentences using:

A. Compare and Contrast

CHARACTERISTICS	TIN	PEWTER
E.g. Conductivity	Conducts electricity and heat	Conducts electricity and heat
21. Hardness	Soft	Hard
22. Appearance	Dull	Shiny
23. Weight	Light	Heavy
24. Composition	100% tin atoms	A mixture of tin, copper and antimony

E.g.: Similar to: **Similar to** pewter, tin also conducts electricity and heat

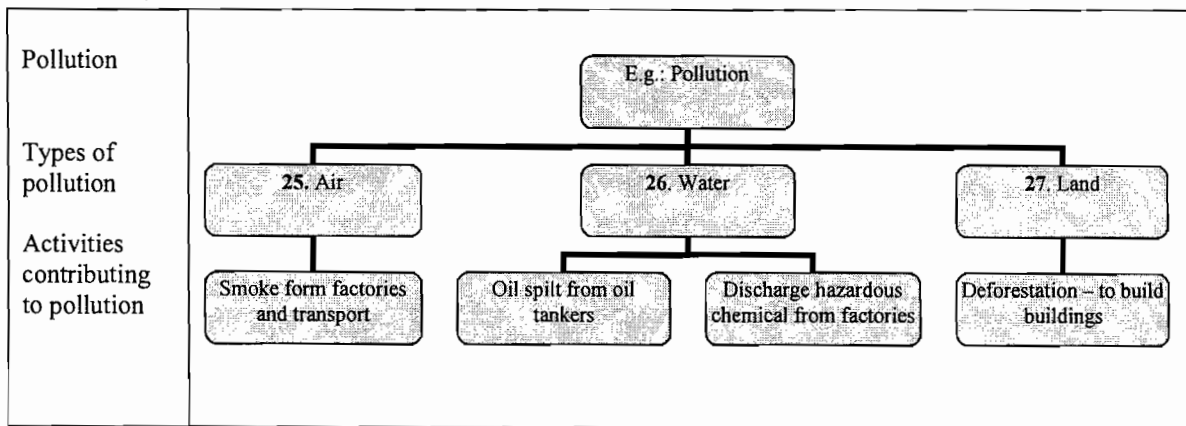
21. In contrast: _____

22. While: _____

23. Unlike: _____

24. On the other hand: _____

B. Classification



Eg: Pollution / category: There are three categories of pollution which are air, water and land pollution.

25. air / classify: _____
: _____

26. water/divide: _____
: _____

27. land/ a form of : : _____
 : _____

C. Cause and Effect

Cause	Effect
E.g. : Large amounts of cash were tied up	The company experienced cash flow problems
28. Economy expanding	Government's total revenue increases
29. Reduction in the prices of locally produced cars	Sale of imported cars were not as good as before
30. The prices of crude oil increase	Profits of oil companies increase

E.G.: As a result: Large amounts of cash were tied up; as a result the company experienced cash flow problems.

28. due to : _____

29. hence : _____

30. in consequence: _____

(20 marks)

