



1B APPLIED INFORMATION TECHNOLOGY

NAME: _____

Time allowed for this paper

Reading/planning time before commencing work: Ten minutes

Working time for paper: Two hours

Material required/recommended for this paper

To be provided by the supervisor -

- This Question Paper
- Standard Answer Booklet
- Tick Sheet for Multiple Choice Answers

To be provided by the candidate -

- Standard items: Pens, pencils, eraser or correction fluid, highlighter, ruler, printed English language dictionary and/or bilingual dictionary (not electronic and not a thesaurus)
- Special items: Mathematical and/or system templates (not essential) and calculators satisfying the conditions set by the Curriculum Council for this course.

Important -

No other items may be taken into the examination room. It is **your** responsibility to ensure that you do not have any unauthorised notes or other items of a non-personal nature in the examination room. If you have any unauthorised material with you, hand it to the supervisor **before** reading any further.

Structure of this paper:	Section A	Multiple Choice	Outcome 2
	Section B	The Technology Process	Outcome 1
	Section C,	Understanding ICT	Outcome 2
		Privacy Issues	Outcome 4
	Section D	Google Data	Outcome 4

Please attempt all questions

Multiple Choice / 15

Outcome 1	Outcome 2	Outcome 4

NOTES TO CANDIDATES

4. Answer all questions in the Standard Answer Booklet provided in blue or black ballpoint or ink pen. Wherever appropriate, fully labelled diagrams and examples should be used to illustrate and support your answers.
 5. You must be careful to confine your responses to the specific questions asked and to follow any instructions that are specific to a particular question.
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The purpose of this examination is to provide students with the opportunity to provide evidence of their levels of achievement of the Applied Information Technology course outcomes (below). Some questions may provide candidates with the opportunity to demonstrate achievement at a restricted range of levels. Other questions may provide the opportunity to demonstrate achievement over the full range of levels.

Outcome 1: Technology process

Students apply a technology process, when creating or modifying information solutions using information communication technologies. In achieving this outcome, students:

- investigate ideas considering alternatives;
- devise, communicate and evaluate proposals and design plans in appropriate forms; and
- implement and evaluate production processes and strategies to manage resources efficiently.

Outcome 2: Understanding information and communication technologies

Students understand the nature and use of computer hardware and software to achieve information solutions. In achieving this outcome, students:

- understand the ICT-related concepts, formats and terminology required to select and use appropriate computer software and hardware to achieve information solutions;
- understand the relationship between forms, structures and conventions of information solutions that influence the selection and use of ICT; and
- understand management, processes, procedures and techniques required to achieve information solutions.

Outcome 4: Information and communication technologies in society

Students understand how cultural beliefs, values, abilities and ethical positions are interconnected in the development and use of information and communication

technologies. In achieving this outcome, students:

- understand the cultural beliefs, values, abilities and ethical positions that can impact on the use of ICT;
- understand the consequences of ICT use in different contexts and how this relates to beliefs, values, abilities and ethical positions; and
- understand the consequences of technological developments on structures and environments.

SECTION A**Outcomes 2 and 4**

This section has 15 multiple choice questions. You must attempt all 15 questions in this section.

A multiple choice question sheet is provided for you to answer questions in this section. Put a tick in the correct box. If you wish to change your answer, simply cross out the original answer.

ONLY ONE ANSWER IS CORRECT

1. The CPU

- A. Controls the main operations of data processing
- B. Stores information
- C. Is a PC utility software application
- D. Always uses Linux
- E. Stands for Controlling Production Unit

2. A computer virus

- A. Can cause your operating system to be damaged
- B. Can be 'caught' from an internet site.
- C. Is transferable via your USB drive
- D. Is found in email attachments
- E. All of the above

3. Which of the following is information?

- A. Thursday
- B. 6
- C. Today is hot.
- D. Blue



E. %%%*

4. Which of the following statements is true?

- A. Information is the collection of data
- B. Information is the meaningful interpretation of data
- C. Information is a computer system
- D. Information is the same as data.
- E. Single digit numbers are classed as information.

5. The Operating System commonly used on the computers at Canning Vale College is

- A. Windows 98
- B. Novell
- C. Windows XP
- D. Apple OS X
- E. Windows 95

6. Which of the following is a peripheral device?

- A. Network cards.
- B. Printer
- C. RAM
- D. Sound file
- E. Motherboard

7. Which of the following does **NOT** involve ergonomics?

- A. Software
- B. Adjustable monitors
- C. Lighting
- D. Adjustable chairs
- E. Footrest

8. Which of the following is **NOT** a file compression type?

- A. JPG
- B. VDU
- C. PNG
- D. TIF
- E. EXE

9. The internet browser owned by Microsoft is

- A. Google
- B. Firefox
- C. Internet Explorer
- D. Yahoo
- E. Ask Jeeves



10. A USB drive is useful because

- A. It is small and portable (easy to carry)
- B. It is easy to lose
- C. It is corruptible
- D. Anyone can steal your files
- E. It cannot be overwritten

11. A search engine

- A. Is the same as an internet browser
- B. Is the same as the school intranet
- C. Works without an internet connection
- D. Always contains truthful information
- E. Is a software program that searches a series of databases

12. Digital data

- A. Is represented as a smooth graph
- B. Works in a smooth and continuous way
- C. Comprises of 'small bites' of information
- D. Comprises of varied amounts of information
- E. Works on the numbers 1- 100

13. The largest graphic file extensions is

- A. .bmp
- B. .exe
- C. .doc
- D. .tif
- E. .gif

14. Read only documents are good because

- A. Anyone can make changes to them
- B. They are large documents
- C. You cannot make changes to the original
- D. They are always very small files
- E. They are easily corrupted

15. Binary is

- A. A method of counting in a spreadsheet
- B. An instruction manual for binoculars
- C. A system employed to transfer data to computers
- D. Used to add new memory to a computer
- E. Works only on new computers



SECTION B

Outcome 1

1. Explain how you used the **Technology Process** to complete one of the tasks you did this semester. Investigate Design Produce Evaluate

Please refer to the rubric below

Outcome 1 The Technology Process

**** To achieve a particular level, you must fulfil all three aspects of that level.****

	Level 4	Level 5	Level 6
<ul style="list-style-type: none"> investigate ideas considering alternatives 	investigate and consider ideas for information solutions and take into account the ideas of others.	investigate ideas for information solutions, considering the appropriateness of existing technologies and the needs of communities and environments.	investigate and consider how information solutions are developed, adapted and used by individuals and communities to meet particular needs.
	<i>Student considers more than one idea for their information product</i>	<i>Student considers the appropriateness of other information products and the needs of others.</i>	<i>Student considers how information products are adapted to meet particular needs.</i>
<ul style="list-style-type: none"> devise, communicate and evaluate proposals and design plans in appropriate forms. 	develop plans for information solutions, based on own investigation, communicating these plans using a range of drawings, diagrams, notes, visual and graphical representations and models; annotate and complete designs; and use simple technical terms and conventions.	devise design plans for information solutions, providing problem analysis, options considered, reasons for choices and identification of input/output needed and constraints, communicating these plans using visual imaging techniques.	devise design plans that include an examination of a range of options and reasons for choices, communicating these using graphics and technical languages associated with particular fields of ICT.
	<i>Student completes and annotates a range of design options, using technical terms and conventions.</i>	<i>Student provides problem analysis and gives reasons for their choices based on product requirement and constraints.</i>	<i>Student examines a range of options and communicates their choices using graphics and technical languages associated with ICT.</i>
<ul style="list-style-type: none"> implement and evaluate production processes and strategies to manage resources efficiently. 	implement and evaluate the product, according to the specific criteria established during the design stage; and use specific criteria to comment on and evaluate product and production methods, working within given constraints.	implement and evaluate production processes, assessing the effectiveness of their given and own specifications, recognising hazards and adopting safe work practices.	implement, evaluate and adjust production processes, based on detailed production plans, considering the efficiency and effectiveness of their processes, which are described using suitable technical languages and conventions and which achieve defined standards of quality.
	<i>Student lists specific criteria during the design stage, makes the product, and evaluates their product using these criteria, finishing their task on time.</i>	<i>Student evaluates the effectiveness of their design and work safely.</i>	<i>Student evaluates the efficiency of their production process, define acceptable standards of quality, and produce work that meets these standards.</i>



Section C

Scenario 1. (Outcome 2)

John and Jenny decide to purchase a computer and a digital camera to allow them to take digital family photographs. Jenny would also like to set up a personal web page to share photographs online with her friends and family while her teenage children would like to be able to play computer games without overloading the system.

Provide recommendations about the hardware and software John and Jenny might buy, explaining -

1. The essential **computer hardware** they will need to achieve their goals.

Explain each of the **components** (items), required. Offer alternatives where you think they are needed.

2. **Justify** your choices and say how they will suit the family members.

Scenario 2. (Outcome 4)

Your friend is planning to start up a deli/ café in a run down part of town. She is worried about the prospect of antisocial behaviour and vandalism so would like to install a CCTV camera inside and outside her premises. She is worried however about her legal responsibilities.

What advice can you give your friend regarding her legal responsibilities and the rights of her clients?

1. Consider **privacy issues** regarding **filming**.

2. What procedures does she need to put in place regarding the **storage** and **retention** of data?

(How long should it be kept and what controls should be put in place to keep it secure?)

3. What are the **clients' rights** regarding **access** to data and other records kept?

* **Retention** = keeping something

Google Data on Users May Break EU Law, Watchdog Says (Update2)

By Stephanie Bodoni

May 25 2007 (Bloomberg)

-- Google Inc., owner of the world's most popular search engine, may be violating the European Union's privacy laws by storing information on customer queries for as long as two years, advisers to EU regulators told the company.

Google's privacy counsel in Paris, Peter Fleischer, said the company received a letter this month from the EU's data-protection advisory agency asking it to explain why records of user searches are retained.

The scrutiny of policies at Google, the gateway to the Internet for tens of millions of users, has increased since it announced plans in April to buy New York-based online advertiser DoubleClick Inc. for \$3.1 billion. Regulators have said that competition among Google, Microsoft Corp. and Yahoo! Inc. to deliver ads to specific users may violate civil liberties.

"Google may have initiated personalization efforts which are more advanced in some ways, but it's an industrywide issue," Greg Sterling, an analyst at Sterling Market Intelligence in Oakland, California, said in a telephone interview. "It is something that the industry as a whole should tackle."

Google's Fleischer said in a May 22 e-mail that the company will reply before the next meeting of the advisory group, called the Article 29 Data Protection Working Party, in June.

Google's Response

"We are committed to engaging in a constructive dialogue with privacy stakeholders, including the Article 29 Working Party, on how to improve privacy practices for the benefit of Google users and for everyone on the Internet," Fleischer said.

Google, based in Mountain View, California, on March 13 cut the time it keeps users' data on Web searches to between 18 and 24 months. Peter Schar, Article 29's chairman, called the changes "very much a step in the right direction," according to the May 16 letter.

Still, he said the new storage period, "on the basis indicated by Google thus far," doesn't seem to meet EU data protection rules. Schar didn't return three phone calls for comment to his office in Bonn, Germany, this week.

"We first wanted to give Google the time to respond before we comment," Schar's spokeswoman, Gabriele Loewnau, said in a telephone interview today. Loewnau, who is also an Article 29 member, said the group will consider the U.S. company's response at its next meeting on June 19 and 20.

Privacy issues are also a focus of regulatory reviews in the U.S. over the DoubleClick takeover. The New York State Consumer Protection Board on May 9 urged federal regulators to delay Google's takeover until the company gives consumers the right to prevent tracking and storing of information about Web sites they visit.

**Section D (Outcome 4)**

1. Read the article on the previous page and consider the problems outlined in it regarding our use of internet Search Engines and the storage of data.

Describe and comment on the issues raised in this article.

- What issues are raised re' privacy?
- What problems could arise as a result of Google's actions?
- What is your view of their actions?

<http://www.bloomberg.com.au/apps/news?pid=20601109&sid=agImLIGaNKaw&refer=home>

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