

# APPLIED INFORMATION TECHNOLOGY SAMPLE EXAMINATION

Section 7 of the *New WACE Manual: General Information 2006–2009* outlines the policy on WACE examinations.

Further information about the WACE Examinations policy can be accessed from the Curriculum Council website at <a href="http://newwace.curriculum.wa.edu.au/pages/about\_wace\_manual.asp">http://newwace.curriculum.wa.edu.au/pages/about\_wace\_manual.asp</a>.

The purpose for providing a sample examination is to provide teachers with an example of how the course will be examined. Further finetuning will be made to this sample in 2007 by the examination panel following consultation with teachers, measurement specialists and advice from the Assessment, Review and Moderation (ARM) panel.





**Sample Examination** 

**Question Paper** 

# **APPLIED INFORMATION TECHNOLOGY**

## Time allowed for this paper

Reading/planning time before commencing work: Ten minutes Working time for paper: Two hours and thirty minutes

## Material required/recommended for this paper

To be provided by the supervisor This Question Paper

Standard Answer Booklet

#### 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 note to candidates

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.

Section	Outcomes	No. of questions available	No. of questions to be attempted	Suggested working time
Section A	1, 2 and 4	9	9	80 minutes
Section B	4	1	1	25 minutes
Section C	1 and 2	3	3	45 minutes

# Structure of this paper

# Instructions to candidates

- 1. The rules for the conduct of Curriculum Council examinations are detailed in the *Student Information Handbook*. Sitting this examination implies that you agree to abide by these rules.
- 2. 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.
- 3. 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.

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. 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.

# **SECTION A**

This section has **two parts** and **NINE** questions. In **Part 1** there are **FIVE** questions framed specifically around a given scenario, design brief and specifications. In **Part 2** there are **FOUR** questions related to the scenario.

Attempt **ALL** nine questions.

Allow approximately 80 minutes to answer this section.

## SCENARIO

The Greydale Community Leisure Centre (GCLC) has just purchased a new rowing machine for the gymnasium.

For copyright reasons the photograph of the rowing machine cannot be reproduced in the online version of this document—it is available in the hard copy version and can also be viewed on the Concept2 website at <a href="http://www.concept2.co.uk/">http://www.concept2.co.uk/</a>

To use the rowing machine, the following instructions were given.

#### STEP 1

Lean back slightly, legs flat, handle drawn to the body. Forearms horizontal.

#### **STEP 2**

The arms are relaxed and extended fully. The body rocks forward from the hips.

#### **STEP 3**

After the arms have fully extended and the body has rocked forward, slide forward, maintaining arm and body position.

#### **STEP 4**

Full Slide—The Beginning. Shins vertical with body pressed up to the legs. The arms are straight and relaxed. The position should feel comfortable.

#### STEP 5

Repeat the above steps.

## Part 1

## Design Brief

The GCLC fitness coordinator knows of your studies as an instructional designer and has asked you to develop an information product that will educate gym members on how to use the rowing machine.

#### **Specifications**

- The placement of your information solution (the environment) is important in ensuring that the product is effective.
- Provide one or more solutions.
- 1. Using the scenario information and the design brief:
  - (a) Develop a design/s for an information product that will instruct gym members on how to use the rowing machine. Use appropriate graphical representation models.

[8 marks]

(b) Annotate your design/s showing the standards and conventions used in your information solution. Communicate your design/s using appropriate technical language, symbols and graphics.

[8 marks]

2. Recommend the most appropriate information product for GCLC, considering the audience and the functional, aesthetic and environmental issues. Justify your design choices and, where necessary, annotate your design representations to illustrate your justifications.

[8 marks]

3. Identify the standards and conventions you considered for your recommended information solution(s). Justify your requirements.

[6 marks]

4. Explain the specific hardware and software requirements you would use to develop and implement your information solution. Justify your selection of hardware and software, based on the requirements for your solution to achieve desired specifications.

[6 marks]

5. Certain processes will need to be followed in order to successfully develop and implement your information solution(s).

In relation to the hardware, software and other resources selected, what management process would you use to develop and implement your information solution(s) to achieve the desired specifications?

[4 marks]

## Part 2

6. The fitness coordinator of the gym has decided that in the future all promotional materials will include images of members using the equipment. The coordinator approaches you to seek advice about privacy, intellectual property and copyright considerations.

Suggest steps that GCLC can take to ensure that they are complying with these considerations.

[3 marks]

#### The information below relates to questions 7-9.

GCLC wants to include a promotional e-zine (electronic magazine) informing gym members about the purchase of new equipment. They have decided to develop a membership list and will need to collect information about their members. A draft collection form has been developed and is shown below.

The fitness coordinator has asked you to make recommendations about how this collection form could be improved, to ensure that appropriate data can be extracted and logically organised into a list structure and that all legislative requirements are met.

G	Greydale Community Leisure Centre			
First Name:	Surname:			
Address:				
Membership Number:				
E-mail Addre	ess:			

7. Redesign and annotate the collection form, showing your recommended changes. Explain the reasons for these changes.

[5 marks]

8. The three main stakeholders are the list developer, GCLC and the gym members.

Explain in detail the impact this collection form will have on each stakeholder.

[8 marks]

9. Software at GCLC is not the latest version and will need to be upgraded.

Identify and list the consequences that this has for GCLC. Explain **ONE** of these consequences in detail and the impact it will have for GCLC.

[10 marks]

# **SECTION B**

This section has **ONE** extended answer question.

Allow approximately 25 minutes to answer this section.

- 6. Continual development of ICT has **benefits and consequences** for all industries and workplaces in Australia and other key stakeholders related to these areas:
  - social
  - personal
  - cultural
  - physical
  - legal
  - economic.

For an industry or workplace context that you have studied, identify the **THREE MOST IMPORTANT** key stakeholders involved. Critically evaluate the benefits and consequences for each key stakeholder for **TWO** of the areas of concern listed above, taking into account their beliefs, values, abilities and ethical positions.

[20 marks]

# **SECTION C**

In this section, you will answer **THREE** reflective questions about the project/production work completed during your studies.

Attempt **ALL** questions.

Allow approximately 45 minutes to answer this section.

- 7. Choose a piece of project/production work you have completed where you used industry standard software.
  - Briefly outline the project/production work and its purpose.
  - Identify the software used and describe the complex functions, techniques and/or procedures within the software you used.
  - Clearly state any limitations of the software and the strategies you used to overcome these limitations.
  - What influence did the target audience or client have in your choice of software and the techniques and/or procedures selected?

[15 marks]

12. Technology process is an important aspect of product development. What criteria did you use to evaluate the effectiveness of your use of the technology processes? What modifications did you have to make? How did you ensure you used time efficiently and resources safely and effectively?

[8 marks]

13. Identify one of the design tools used to create a project/production work (e.g. storyboards, flowcharts or templates). Justify the changes you would make to improve your project/production work in the future. In your response, refer to the changes in relation to the choice of hardware, software and other resources to improve the quality of your information product.

[15 marks]

#### ACKNOWLEDGEMENTS

#### SECTION A

Scenario: Concept 2. (n.d.). *Concept 2 indoor rower* [Photograph: Model D]. Retrieved April, 2006, from <u>http://www.concept2.co.uk/</u>.

> Published by the Curriculum Council of Western Australia 27 Walters Drive OSBORNE PARK WA 6017