

**PLACE LABEL HERE**

**Tasmanian Secondary Assessment Board**

**Tasmanian Certificate of Education**

**External Assessment**

**2001**

**TE876 COMPUTER GRAPHICS AND DESIGN**

**Time: Three Hours**

On the basis of your performance in this examination, the examiners will provide a rating of A, B, C or D on each of the following criteria taken from the syllabus statement:

**Criterion 5**      Solve problems.

**Criterion 9**      Demonstrate an understanding of technological change.

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Questions:    27  
Pages:        25

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## CANDIDATE INSTRUCTIONS

Candidates must attempt:

<b>SIX</b> questions from	<b>Section A – Part 1</b>
<b>ONE</b> question from	<b>Section A – Part 2</b>
<b>EIGHT</b> questions from	<b>Section B</b>
<b>ONE</b> question from	<b>Section C</b>
<b>ONE</b> question from	<b>Section D</b>

All sections are of equal value.

All answers must be written in the spaces provided on the examination paper.

Care should be taken with the presentation of answers. The answers should be comprehensive and to the point. Diagrams are encouraged but **NOT** to the exclusion of all text, **except** in **Section A – Part II** and **Section C** where labelled sketches are required.

It is recommended that you spend approximately:

- 45 minutes on Section A
- 45 minutes on Section B
- 45 minutes on Section C
- 45 minutes on Section D

**SECTION A**

This section assesses **Criterion 5**.

**Part I**

Answer **SIX** questions from this **Part**.

**Question 1**

Describe the advantages of digital video over film.

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**Question 2**

List the steps required to create a data backup procedure for a graphics office with five workstations.

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**Question 5**

Describe the type of content required to design a web page advertising a 'bed and breakfast home'.

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**Question 6**

Packaging is extremely important for a perfume company to display a new line of products. What are the basic design principles required to produce a package that is both appealing and practical?

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<b>SECTION A</b>
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**Part II**

Answer **ONE** question from this **Part**.

Your answer should consist of a sketch or series of sketches followed by written notes explaining important features of the design.

**Question 9**

Choose **one** of the following design problems below, and develop a journal, containing sketches with written support, that will show how you could solve the problem.

- (a) The handle of a pot becomes too hot to hold when the pot is heated. Design a handle that remains cool when the pot is heated.

**Or**

- (b) Blind people cannot play many indoor games available to sighted people. Design a game of naughts and crosses that can be played by blind people.

**Or**

- (c) A stack of paper has been cut to size to produce note paper. Design a container or mechanism which allows you to take only one sheet at a time.

**Question 10**

Storyboarding is used to plan, produce and evaluate multimedia presentations. Explain the detail that is required in a storyboard, then produce a storyboard for a safety film on 'How a pedestrian should cross a road safely.'





**Sketch Sheet for Question No: .....**

**SECTION B**

Answer **EIGHT** questions from this section.

All questions are of equal value.

This section assesses **Criterion 9**.

**Question 11**

Explain the advantages of digital graphics over still graphics.

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**Question 12**

Explain the process involved in creating a realistic image of an apartment house on a clear block of land in a city block, from a photo of the land and a 3D model of a house.

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**Question 13**

Give a brief (no more than two sentences) explanation regarding the advances made in the following areas:

(a) Operating Systems

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(c) VDU

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(d) WYSIWIG

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**Question 14**

What was the precursor to a mouse? What new innovations have been made to this interface of your computer workstation?

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**Question 15**

‘To create total shape for an object involves using subtle pattern of light and shade and also perspective technique’. How have graphic tools developed to enable designers to create this effect?

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**Question 16**

Describe why the following three elements are critical requirements in any CAD drawing package.

- 1. Rotation
- 2. Scaling
- 3. Translation

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**Question 17**

Describe the evolution of the Graphic User Interface (GUI) listing enhancements that strengthen the desktop metaphor.

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**Question 18**

Digital asset management is becoming an important part of the infrastructure in any graphic design office. What is asset management and what strategy and applications would you put in place to implement this?

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**Question 21**

A graphics office recognizes the need to upgrade a number of their graphics applications. To assess their suitability design a questionnaire with at least six criteria that could be used to evaluate the software.

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**Question 22**

Describe the benefits of 'pre-visualisation' techniques available to today's designers.

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<b>SECTION C</b>
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Answer **ONE** question from this section.

Answers should consist of an essay accompanied by a sketch as described in the question.

Clearly indicate which question you are answering.

This section assesses **Criterion 5**.

### **Question 23**

Production of a promotional video seeking support for a third world country is required. Within video footage taken by another person (whilst overseas) there are scenes of the country, its people and the manual labour techniques used for development.

The promotional video is to be used to raise funds to aid these people in the areas of health and sanitation, especially clean water. It is to be screened to a wide and varied audience.

You are asked to create a promotional video. This video is to be no longer than 5 minutes. It is to include graphics, text and segments of the video footage. It must include sound, music and a presenter.

Discuss the procedure that you would adopt and present a plan showing the steps required to reach a high standard production. Also provide technical information on equipment required.

### **Question 24**

You have been asked to consider developing a new web site for a local sporting association. In your negotiation to win this contract you have jotted down the following points for discussion:

1. Consultation – can be in person or email.
2. Content acquisition and management.
3. Decisions – regarding layout as you progress with the site. You will meet with them for layout progress reports.
4. Pricing – which will depend on a number of factors.

Outline what you will discuss using the **four** main headings. Show them a general suggested layout.





**Sketch Sheet for Question No: .....**

<b>SECTION D</b>
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Answer **ONE** question from this section.

Clearly state which question you are answering.

All questions are of equal value.

This section assesses **Criterion 9**.

**Question 25**

Discuss the impact and implications of Broadband\* and radio networking into commercial and domestic sites.

*\*Broadband* – High speed connection or access

**Question 26**

The following is a list of suggestions to speed up a web page when loading into a browser.

- Use the right graphics format
- Optimise your graphics
- Make sure to fill in width and height attributes
- Slice large graphics
- Get to know html
- Go easy on nested tables and pages contained in tables
- Use bells and whistles sparingly
- Use a good web hosting service

Explain the implications of each of the above, providing details or techniques on achieving optimum performance.

**Question 27**

In the present environment it is imperative that a graphic designer has extensive knowledge and experience of a wide range of graphics applications.

This has implications for the education and training for people in the industry. Discuss the wide variety of roles and skill sets required for individuals within a graphics and design team.





