TASMANIAN ASSESSMENT, STANDARDS & CERTIFICATION

External Assessment 2026

Attach your candidate label here

COMPUTER GRAPHICS AND DESIGN

CGD315118

Section A

Pages: 12

Questions: 8

Preparation time for this exam: 15 minutes

Suggested working time: 20 minutes

Instructions:

- Answer **four (4)** questions in this section.
- Write your answers in the spaces provided in this exam paper.
- The exam is **two (2) hours** in length. The suggested working time for this section is **approximately 20 minutes**.
- All answers must be written in **English**.
- You **must** make sure your answers address the listed criterion.

Marker use	
C6	/ Alpha

© Copyright for part(s) of this exam may be held by individuals and/or organisations other than Tasmanian Assessment, Standards and Certification.

Guide to Exam Structure

	Questions available	Questions to answer	Suggested working time	Marks available
Section A	8	4	20 minutes	All criteria are assessed using extended ratings of A+ to z
Section B	8	4	20 minutes	
Section C	4	1	40 minutes	
Section D	6	1	40 minutes	
Totals	**26**	**10**	**120 minutes (2 hours)**	

Criterion

You **must** make sure your answers address:

- Criterion 6 analyse the impact of design in society.

Section A

Marker use

- Answer only **four (4)** questions in this section.
- All questions are of equal value.
- Section A carries half the weight of Section C, which also assesses Criterion 6.

Question 1

"A designer knows they have achieved perfection not when there is nothing left to add, but when there is nothing left to take away" is an opinion expressed by the French writer Antoine de Saint-Exupéry. What does this opinion mean for designers?

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 2

Marker use

Sustainable design thinking is an important consideration for designers working across a diverse range of design disciplines. Detail **three (3)** principles to consider when applying sustainable design thinking.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 3

Marker use

There are a diverse range of **artificial intelligence (AI)** 2D and 3D graphic tools. They can be used to generate content and may enhance a designer's productivity. When developing design content, discuss a situation where **AI** tools enhance productivity.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 4

Marker use

Identify **one (1)** major **historical design movement** and discuss the **social conditions** that led to its emergence.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 5

Marker use

A designer has been asked to develop a design for a tiny home to address the social issue of housing affordability for single people. What **functional and environmental design** considerations should be explored when designing a tiny home for such people?

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 6

Marker use

Colour theory is often used in design to communicate mood and emotion. What emotions or moods might a designer be trying to convey by using “cool” colours, such as blue and green?

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 7

Marker use

From the perspectives of the designer and the client, discuss the **intellectual property rights (copyright)** implications of using free 3D models, texture maps, and other visual content downloaded from the internet.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 8

Marker use

When designing a range of furniture, a designer has to choose between a sustainable material with a higher cost or a cheaper, less sustainable material. Justify how you would approach resolving this conflict.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

End of Section A

Blank Page



This exam paper and any materials associated with this exam

(including answer booklets, cover sheets, rough note paper, or information sheets)

remain the property of Tasmanian Assessment, Standards and Certification.

© Copyright for part(s) of this exam may be held by individuals and/or organisations other than Tasmanian Assessment, Standards and Certification.

TASMANIAN ASSESSMENT, STANDARDS & CERTIFICATION

External Assessment 2026

Attach your candidate label here

COMPUTER GRAPHICS AND DESIGN

CGD315118

Section B

Pages: 12

Questions: 8

Suggested working time: 20 minutes

Instructions:

- Answer **four (4)** questions in this section.
- Write your answers in the spaces provided in this exam paper.
- The exam is **two (2) hours** in length. The suggested working time for this section is **approximately 20 minutes**.
- All answers must be written in **English**.
- You **must** make sure your answers address the listed criterion.

Marker use	
C7	/ Alpha

© Copyright for part(s) of this exam may be held by individuals and/or organisations other than Tasmanian Assessment, Standards and Certification.

Guide to Exam Structure

	Questions available	Questions to answer	Suggested working time	Marks available
Section A	8	4	20 minutes	All criteria are assessed using extended ratings of A+ to z
Section B	8	4	20 minutes	
Section C	4	1	40 minutes	
Section D	6	1	40 minutes	
Totals	**26**	**10**	**120 minutes (2 hours)**	

Criterion

You **must** make sure your answers address:

- Criterion 7 describe and apply key features, applications and influences on contemporary computer graphics systems.

Section B

Marker use

- Answer only **four (4)** questions in this section.
- All questions are of equal value.
- Section B carries half the weight of Section D, which also assesses Criterion 7.

Question 9

Keyframing and straight ahead are **two (2)** different methods used to develop animation. Explain the key concepts of these **two (2)** methods and provide an example of situations where each could be used effectively.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 10

Marker use

Both **raster** and **vector** graphic systems are used to produce 2D computer graphic content. Explain how these **two (2)** systems differ in the way they represent such content.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 11

Marker use

A design team is recreating a 1980s-style computer interface for a game. Detail **two (2)** historical limitations of early computer graphics that would influence their design decisions.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 12

Marker use

A designer working with 4K video editing is experiencing slow playback and long export times. Identify the most likely hardware limitations and justify recommended component upgrades to resolve the issues.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 13

Marker use

Detail the role of the **GPU (Graphics Processing Unit)** in a graphic workstation and explain why it is critical for 3D modelling and rendering.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 14

Marker use

Explain why **layer height** influences both surface finish and total print duration in **3D printing**.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 15

Marker use

A **High Dynamic Range Image (HDRI)** file is an **image-based lighting (IBL)** solution that is often used in 3D-based computer graphic production. Explain the advantages of using an IBL lighting solution such as an HDRI file for scene lighting?

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 16

Marker use

Detail the differences between **lossy** and **lossless compression** and explain how each compression method influences file size, quality, and long-term data integrity.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

End of Section B

Blank Page



This exam paper and any materials associated with this exam

(including answer booklets, cover sheets, rough note paper, or information sheets)

remain the property of Tasmanian Assessment, Standards and Certification.

© Copyright for part(s) of this exam may be held by individuals and/or organisations other than Tasmanian Assessment, Standards and Certification.

TASMANIAN ASSESSMENT, STANDARDS & CERTIFICATION

External Assessment 2026

Attach your candidate label here

COMPUTER GRAPHICS AND DESIGN

CGD315118

Section C

Pages: 12

Questions: 4

Suggested working time: 40 minutes

Instructions:

- Answer **one (1)** question in this section.
- Write your answers in the spaces provided in this exam paper.
- The exam is **two (2) hours** in length. The suggested working time for this section is **approximately 40 minutes**.
- All answers must be written in **English**.
- You **must** make sure your answers address the listed criterion.

Marker use	
C6	/ Alpha

© Copyright for part(s) of this exam may be held by individuals and/or organisations other than Tasmanian Assessment, Standards and Certification.

Guide to Exam Structure

	Questions available	Questions to answer	Suggested working time	Marks available
Section A	8	4	20 minutes	All criteria are assessed using extended ratings of A+ to z
Section B	8	4	20 minutes	
Section C	4	1	40 minutes	
Section D	6	1	40 minutes	
Totals	**26**	**10**	**120 minutes (2 hours)**	

Criterion

You **must** make sure your answers address:

- Criterion 6 analyse the impact of design in society.

Section C

- Answer only **one (1)** question in this section.
- All questions are of equal value. Answers must consist of written notes accompanied by sketches with annotations explaining important features of the design. Space is provided on pages 6–8.
- Section C carries double the weight of Section A, which also assesses Criterion 6.

Question 17 (Branding Focus)

Effective branding is important for any new business. A boutique beverage company has developed a new juice product from the Latin American fruits lulo and açai called ‘AGRIAS’ (Spanish for sour) which is targeted at the Gen Z demographic. The company requires a visual identity (logo) for their stands in stores, product packaging, and marketing materials. The marketing focus is that the beverage product is energy-rich, healthy, and tasty.

a) **Discuss** the social, ethical, and environmental factors to be considered in designing a beverage brand and product for the target market.

b) **Sketch three (3)** logo designs that the company could select from.

c) **Annotate** the **three (3)** logo designs to explain how each design addresses the social, ethical and environmental factors discussed in item a).

OR

Question 18 (Storyboarding Focus)

Tourism Tasmania wants to attract more visitors to enjoy Tasmania's high quality food and beverages in an environmentally sustainable way.

Your design team has been asked to design and develop a 20 second advertisement. It will incorporate both animated and filmed footage as part of the advertising campaign. It will be shown on a range of social media platforms.

a) **Discuss** the types of consultation that need to occur during the design development phase to understand and communicate the **key environmental** and **social messages** as well as the **quality of food and beverage products**.

b) **Sketch** a storyboard of **at least six (6)** image boards.

c) Add **annotations** to the storyboard to explain the environmental, social and product quality messaging in the advertisement.

OR

Question 19 (Character Design Focus)

An animation company is producing a new G-rated series for television and online broadcasting. The series title is *The Lighthouse Kids*. It is about a twelve-year-old girl and her nine-year-old brother's adventures living in a remote lighthouse with their parents.

The company requires concept designs for the characters.

a) **Discuss** in detail the types of **social and ethical consultations and decisions** that would need to be made before production commences.

b) Produce **detailed front and side view sketches** of **one (1)** of the characters to illustrate their persona (body and facial features) and typical clothing.

c) **Annotate** the sketches to reflect the social and ethical considerations discussed in item a).

OR

Question 20 (Product Design Focus)

Reduced hand function is a common problem among senior citizens, and they often require modified cutlery and crockery to maintain independence. Your design team has been approached to present concepts for a range of modified crockery and cutlery. They are to be produced using sustainably sourced materials.

a) **Discuss** how design decisions involving usability, ergonomics, sustainably sourced materials, aesthetics, and emerging technologies can enhance a person's independence, promote social inclusion, and improve quality of life.

b) **Sketch** preliminary designs for a knife, fork, spoon, cup, and bowl. Take into account the following factors:

- aesthetically attractive with a modern feel
- comfortable to use
- resistant to damage and wear.

c) Clearly **annotate** the sketches to demonstrate how each design addresses reduced hand function, taking into account the factors in item b).

Marker use

Notes for Question: ☐

Write the question number you are answering in the box.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Complete sketches for Question 17 or 18 or 19 or 20 on this page.

Marker use

Question Number:

Write the question number you are answering in the box.

Complete sketches for Question 17 or 18 or 19 or 20 on this page.

Marker use

End of Section C

Blank Page

Blank Page

Blank Page



This exam paper and any materials associated with this exam

(including answer booklets, cover sheets, rough note paper, or information sheets)

remain the property of Tasmanian Assessment, Standards and Certification.

© Copyright for part(s) of this exam may be held by individuals and/or organisations other than Tasmanian Assessment, Standards and Certification.

TASMANIAN ASSESSMENT, STANDARDS & CERTIFICATION

External Assessment 2026

Attach your candidate label here

COMPUTER GRAPHICS AND DESIGN

CGD315118

Section D

Pages: 12

Questions: 6

Suggested working time: 40 minutes

Instructions:

- Answer **one (1)** question in this section.
- Write your answers in the spaces provided in this exam paper.
- The exam is **two (2) hours** in length. The suggested working time for this section is **approximately 40 minutes**.
- All answers must be written in **English**.
- You **must** make sure your answers address the listed criterion.

Marker use	
C7	/ Alpha

© Copyright for part(s) of this exam may be held by individuals and/or organisations other than Tasmanian Assessment, Standards and Certification.

Guide to Exam Structure

	Questions available	Questions to answer	Suggested working time	Marks available
Section A	8	4	20 minutes	All criteria are assessed using extended ratings of A+ to z
Section B	8	4	20 minutes	
Section C	4	1	40 minutes	
Section D	6	1	40 minutes	
Totals	**26**	**10**	**120 minutes (2 hours)**	

Criterion

You **must** make sure your answers address:

- Criterion 7 describe and apply key features, applications and influences on contemporary computer graphics systems.

Section D

- Answer only **one (1)** question in this section.
- All questions are of equal value.
- Your answer must consist of an **extended response**. Space is provided on pages 6–8.
- Section D carries double the weight of Section B, which also assesses Criterion 7.

Question 21 (3D Modelling)

Key features of contemporary 3D modelling and computer graphics systems influence the way digital products are designed and produced. Select a 3D graphic application you are familiar with and:

a) Discuss the core technical components (such as rendering engines, modelling tools, file formats, and hardware acceleration).

b) Explain their applications in real-world design contexts.

c) Evaluate how these systems shape current industry practices in fields such as animation, architecture, gaming, or product design.

OR

Question 22 (Solid Modelling and 3D Digital Fabrication)

A school needs to produce 50 identical components for a robotics project that students will undertake as part of their Digital Technologies studies.

a) Assess the feasibility of using **3D printing** versus other manufacturing methods such as **CNC machining** or **injection moulding**.

b) Compare and contrast aspects such as materials, time, machine set up and cost of machinery.

c) Evaluate how **solid modelling** and **3D digital fabrication** are used in the manufacturing industry.

OR

Question 23 (Animation)

Disney's twelve basic principles of animation were introduced by the Disney animators Ollie Johnston and Frank Thomas in their 1981 book *The Illusion of Life: Disney Animation*. The book is regarded by many animators as the "bible of animation".

a) Analyse the purpose of **animation principles**.

b) Explain at least **six (6**) of the principles with a practical example of how each principle can be applied by an animator.

c) Discuss an example of how these **six (6)** principles have been incorporated in an animation application.

OR

Question 24 (Video and Motion Graphics)

Contemporary video and motion graphics systems use key features such as compositing tools, animation workflows, rendering engines, and digital effects pipelines to shape the creation of modern visual media. Select an application and:

a) Discuss the core technical components of the application.

b) Explain how these technical components are used in real-world productions such as advertising, film, gaming, or social media content.

c) Evaluate how advances in computer graphics technologies influence current industry practices and audience expectations.

OR

Question 25 (Asset Development, Game Design and Production)

Contemporary computer graphics-based game systems support the development, design, and production of game assets.

a) Discuss key features such as modelling tools, texturing workflows, shaders, physics engines, and real-time rendering.

b) Explain how these features are applied in professional game-development pipelines.

c) Evaluate how advances in these technologies influence visual quality, performance, and player experience in modern games.

OR

Question 26 (Interactive Design)

Interactive design is continuing to evolve in response to emerging technologies and shifting user expectations.

a) Discuss the key features of contemporary interactive design systems by choosing **two (2)** of the following:

- adaptive interfaces
- immersive environments
- gesture-based interaction
- AI-driven personalisation
- cross-platform ecosystems.

b) Explain how features of the **two (2)** discussed in item a) are applied in modern digital experiences.

c) Evaluate how current trends in interactive design are reshaping how users engage with products, services, and information.

Question Number:

Write the question number you are answering in the box.

Marker use

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Marker use

Marker use

End of Section D

Blank Page

Blank Page

Blank Page



This exam paper and any materials associated with this exam

(including answer booklets, cover sheets, rough note paper, or information sheets)

remain the property of Tasmanian Assessment, Standards and Certification.

© Copyright for part(s) of this exam may be held by individuals and/or organisations other than Tasmanian Assessment, Standards and Certification.