

# VCE VET Multimedia

## Computer-based examination – November

The examination will be based on all units of competence in the Unit 3–4 sequence of the Certificate III in Multimedia.

These five competencies are

- CUFMEM07A Apply principals of visual design and communication to the development of a media product
- CUFIMA03A Create 2D digital animation
- ICPMM15DA Develop a multimedia script
- ICPMM65DA Create web pages with multimedia
- CUFWRT05A Write content and/or copy

Examination questions are related to the underpinning knowledge and skills detailed in these units of competence.

### Structure and format

There will be **no** optional questions on the examination. The examination will comprise three sections.

**Section A** will consist of 20 multiple-choice questions each worth one mark. All competencies will be addressed in this section.

**Section B** will consist of a series of short-answer questions. All competencies will be addressed. This section will be worth approximately 40 marks.

**Section C** will consist of one or two practical exercises. Again all competency may be assessed in this section. It will be worth approximately 40 marks.

All five competencies may be examined in all sections of the examination, however all competencies will not necessarily be evenly weighted in each section of the examination.

Question formats are demonstrated or described in the ‘VET Multimedia Sample questions 2004’ provided by the VCAA.

The main change to the content of the program involves two new competencies.

- ICPMM15DA Develop a multimedia script
- CUFWRT05A Write content and/or copy

### Scripting

Students will be expected to answer questions in **one** of the following scripting languages.

- Javascript/ECMA-262,
- Macromedia Flash - ActionScript,
- Macromedia Director - Lingo **only**

Students will also be expected to be able to interpret and answer questions using pseudocode.

The same task will be set for all scripting language choices.

Within the examination, students may be provided with scripting information. This material may contain a range of scripting elements and their applications.

Short-answer and practical questions may include

- writing code in response to a prescribed scenario (students will not be required to write large quantities of code from scratch)
- modify/debug partially completed code.

This code may be in **either** the three languages specified **or** in pseudocode.

When using Flash and Director students will be expected to be able to embed Flash/Shockwave movies into existing web pages.

Examination questions **may** include scripts that

- capture input data
- validate input data
- display appropriate text/graphic/animation or other multimedia output responses
- navigate by interaction
- react to certain events
- use default and user defined functions including function parameters (Javascript / ECMA – 262, Macromedia Flash – ActionScript)
- use default and user defined handlers including handler arguments (Macromedia Director – Lingo)
- manipulate data through the use of
  - string manipulation
  - numeric calculations (including the use of randomising and rounding off numbers)
  - operators
  - conditional and repetition statements

The examination will not include

- user defined constructor functions defining a class (Javascript / ECMA – 262, Macromedia Flash – ActionScript),
- Parent, Ancestor and Child scripts (Macromedia Director – Lingo)
- references to 3D objects (Macromedia Director – Lingo)
- arrays
- writing information to disk
- importing data from an external database

Further information on scripting questions has been provided in the VCAA sample 2004 questions.

### The examination

The VCE VET multimedia examination will continue to be undertaken by students using computers.

The delivery requirements and arrangements for conducting the examination will be similar to advice given in previous years.

Full details of the technical and procedural requirements for the examination are provided to approved examination centres.

### Software

Students will be required to use and have access to the following software applications for the purpose of the examination.

Function	Software
Graphic Interface	Photoshop 5.0 OR Corel
Animation	Director 6.0 OR Flash 4
Scripting	Notepad, Simple text
Creating web pages	Front Page OR Dreamweaver 2.0 And a web browser
Creating content and/or copy	Notepad, Simple text

Later versions of these software applications can also be used.

## Operating systems

The computer based examination requires examination centres to use one of the following operating systems on those machines to be used in the November examination.

- Windows 98, ME, 2000, NT
- MAC OS9, OS10

## Hardware

Consistent with previous VCAA advice and examinations (2001–2003) each student will require the following hardware to undertake the examination.

- PC or Mac
- Headphones

Examination monitors should be set with a screen resolution of  $1024 \times 768$ .

The hardware used in the examination should run at a speed and with sufficient memory to allow multiple software applications to be open and used effectively.

Practical questions will clearly indicate the file formats in which students are required to save their answers. Work provided in alternate file formats will not be marked.

For example if a question requires a web site to be prepared in \*\*.html, work saved in \*\*.dir, \*\*.swf or \*\*.psd will not be opened and will be marked as 0.

## Sample questions

### CUFMEM07A Apply principles of visual design and communication to the development of a multimedia product

#### Question 1

The resolution at which vector artwork displays is based on

- A. its dpi.
- B. the total number of pixels.
- C. the input device which created it.
- D. the output device that displays it.

#### Question 2

To display an image correctly on an 8 bit monitor you would have to use

- A. a tiff image.
- B. a rgb image.
- C. an alpha channel.
- D. an indexed colour image.

#### Question 3

Selecting part of a picture and discarding the rest is known as

- A. sizing.
- B. filtering.
- C. cropping.
- D. transforming.

**Question 4**

A style guide is

- A. a file that contains a style sheet.
- B. a document that describes all elements on a single web page.
- C. a group of classes that determine font, font colour and font size on a web page.
- D. a document that describes the stylistic attributes of an organisation's publications.

**Question 5**

A 7 bit image contains

- A. 64 colours.
- B. 128 colours.
- C. 257 colours.
- D. 512 colours.

**Question 6**

When you construct a web page entirely yourself, for yourself, who owns the copyright for the visual design?

- A. you
- B. the web site host
- C. the visual design is copyright free after 90 days
- D. the software company whose graphics software you used

**Question 7**

Which of the following is an example of a lossy image format?

- A. TIFF using LZW compression
- B. JPEG of medium quality
- C. GIF without dithering
- D. All of the above.

**Question 8**

Which one of the following is **not** a visual design element?

- A. line
- B. icon
- C. point
- D. shape

**Question 9**

Two different typeface samples are shown below.

<b>Blackwood</b>	<b>Blackwood</b>
Sample A	Sample B

- a. Which sample is an 'oldstyle' typeface?
- b. Name one attribute of oldstyle typefaces to justify your choice.

1 + 1 = 2 marks

**Question 10**

What is 'lossy' compression and what is it used for?

1 + 1 = 2 marks

**Question 11**

Explain the **design element** or the **design principle** that best represents a pair of pictures. Identify one graphic attribute, common to each picture, to justify your choice.

2 marks

**Question 12**

Briefly describe how the following principles relate to multimedia as an animation/web page development.

- a. visual clues in design
- b. consistency in design
- c. efficiency in design

1 + 1 + 1 = 3 marks

**Question 13**

Your client has developed a generic interface for their web site.

The client has since identified two distinct target user groups.

- young people looking for xyz information
- elderly retired people looking for xyz information

Your client wishes to provide an interface that adjusts to the users' needs.

Describe **three** design changes to the interface that would be appropriate for elderly users. Justify each change.

2 + 2 + 2 = 6 marks

**Question 14**

Describe **two** differences between a rough sketch and a storyboard.

1 + 1 = 2 marks

**Question 15**

Place the following stages of preproduction of a printed flyer in the correct order.

- design brief
- client meeting
- draft layouts
- colour selection

1 mark

**Question 16**

You are creating a new web site for a client. You have found an image on a clip art site that you would like to use. Read the usage guidelines below.

**Usage Guidelines**

In utilising the ABC Clipart site you are permitted to use, modify, and publish the content subject to the following restrictions.

You are permitted to use the content, including online use and multimedia applications, as long as all of the following conditions are met:

- the images are incorporated for viewing purposes only
- the images do not comprise a large portion of the content of the application
- no permission is given by you to download and save the images for any reason

You are not permitted to:

- redistribute the content as stock photography, clipart, web art or multimedia
- use any of the photo or clipart images for any commercial purposes
- create obscene or scandalous works, as defined by the Federal Government at the time the work is created
- use the content or any modification of the content

Can you use this image on your web site? Give reasons for your response.

2 marks

**2D Animation****Question 1**

Which of the following file formats delivers vector-based animation on the web?

- A. animated GIF
- B. AVI
- C. EPS
- D. SWF

**Question 2**

Tweening is the process of

- A. animating an object to make it spin.
- B. joining pieces of animation with a fade or slide.
- C. generating frames between key frames to animate an object.
- D. duplicating frames and moving an object slightly in each to make it move.

**Question 3**

In an animated sequence 'fade in' and 'dissolve' are examples of

- A. motion.
- B. morphing.
- C. transitions.
- D. transformations.

**Question 4**

A RGB image is typically

- A. 8 bit.
- B. 24 bit.
- C. 32 bit.
- D. 64 bit.

**Question 5**

The dissolve transition is generally used to indicate

- A. the end of a camera shot.
- B. the start of a camera shot.
- C. the lapse of time between camera shots.
- D. two camera shots as being quite separate.

**Question 6**

A junior animator has been asked to quickly develop a short 2D animation in the most easily viewed web format. Which of the following formats is most appropriate?

- A. AVI
- B. GIF
- C. HTML
- D. MPEG

**Question 7**

Anti-aliasing of bitmapped images

- A. decreases the images size.
- B. improves the colour of images.
- C. reduces rough edges or jaggies.
- D. gives the images a textured look.

**Question 8**

When working in a commercial setting, why is it important to create a storyboard before beginning on animation? Give **three** reasons.

1 + 1 + 1 = 3 marks

**Question 9**

Describe the difference between 'motion tweening' and 'shape tweening'.

2 marks

**Question 10**

Describe **two** elements of a dolly in animation.

1 + 1 = 2 marks

**ICPMM65DA Create web pages with multimedia****Question 1**

Two methods of handling forms are

- A. Get and Post.
- B. CGI and Script.
- C. Send and HTTP.
- D. Sendmail and ShoppingCart.

**Question 2**

Uploading files to a web site on the World Wide Web is usually done using which protocol?

- A. eftp
- B. ftp
- C. htp
- D. http

**Question 3**

What is the correct HTML code for making a hyperlink?

- A. `<a href=" http://www.outstandingdesign.com.au "> outstandingdesign </a>`
- B. `<a url=" http://www.outstandingdesign.com.au "> outstandingdesign </a>`
- C. `<a name http://www.outstandingdesign.com.au "> outstandingdesign </a>`
- D. `<a>http:// http://www.outstandingdesign.com.au </a>`

**Question 4**

Your client is happy with the look and has signed off on the final content of the web site developed for them. What is the most important thing for you to do next?

- A. Spell check the content and upload to the web.
- B. Draw up a flowchart to give to the client as documentation.
- C. Validate the page to ensure it is readable in a range of browsers.
- D. Upload the page and see if anyone complains if it does not work correctly.

**Question 5**

Which of the following objects does **not** require a form to function?

- A. Input
- B. Textarea
- C. Checkbox
- D. Imagemap

**Question 6**

Search engines are used on the World Wide Web to identify

- A. paid up sites.
- B. pages considered most valuable by editors.
- C. those sites most visited as rated by site hits.
- D. sites that match one or more search parameters.

**Question 7**

Describe the conversion of a high quality digital photo saved as a Tiff to a format suitable for use on the web page.

4 marks

**Question 8**

To make a FTP connection, what **three** pieces of information do you generally need?

3 marks

**Question 9**

- a. In HTML, what does the attribute NAME in the <a> (anchor) tag do?
- b. Name another commonly used attribute in this tag?

1 + 1 = 2 marks

**ICPMM15DA Develop a multimedia script****Question 1**

A mark-up language is the process of adding codes to a document

- A. to describe its structure and format.
- B. to aid interaction with its structure and format.
- C. to give functionality to its structure and format.
- D. to manipulate operators, regular expressions, variables and arrays.

**Question 2**

Javascript is generally used as

- A. a sever side script.
- B. a client side script.
- C. an stand alone executable script.
- D. a Common Gateway Interface (CGI) script.

**Question 3**

When a web page is loaded, which event handler performs an action?

- A. Body
- B. Onload
- C. Onchange
- D. Onfocus

**Question 4**

The <SCRIPT> tag can occur

- A. once only in the head of a page.
- B. many times only in the body of a page.
- C. only in the head of a page and in event handlers.
- D. many times in the head or in the body of a page.

**Question 5**

The most significant difference between local and global variables is

- A. the type of procedure the variable can use.
- B. the name you use to reference them.
- C. the type they can represent.
- D. their scope.

**Question 6**

Which of the following is **not** a sound file format?

- A. .AIF
- B. .MID
- C. .PNG
- D. .WAV

**Question 7**

Which of the following is **not** a feature of algorithm?

- A. follows strict rules of syntax
- B. has clearly defined rules for setting out
- C. is independent of programming languages
- D. completely defines all the steps in the program

**Question 8**

You have been asked to review a multimedia game with a variety of inputs. What is a difference between verification and validation, in this context?

2 marks

**Question 9**

- a. What is 'desk checking'?
- b. Why would you use it?

1 + 1 = 2 marks

**Question 10**

- a. Give **two** reasons to optimise files for download from a web site.
- b. Name and describe **two** processes used to optimise web site files.

2 + 4 = 6 marks

**CUFWRT05A Write content and or copy****Question 1**

When developing content for a multimedia product, what are the three basic information structures used?

- A. linear, hierarchical, web
- B. sentence, paragraph, list
- C. paper, CD ROM, Internet.
- D. primary, secondary, tertiary

**Question 2**

Which of the following should be avoided when writing content for global web sites?

- A. clichés
- B. repetition
- C. short points
- D. factual reporting

**Question 3**

Which of the following instructions should be **ignored** when positioning your monitor?

- A. Position the monitor at right angles to the window to minimise reflection and glare.
- B. Position the monitor so that artificial lighting does not reflect from the screen.
- C. Position the monitor so the top of the monitor screen is well above eye level.
- D. Position the monitor about 45–65 cm from the eyes.

**Question 4**

When writing technical texts, its best to write in the

- A. first person.
- B. second person.
- C. third person.
- D. passive voice.

**Question 5**

It is generally accepted that web content should have approximately

- A. 25% of the word count of its paper equivalent.
- B. 50% of the word count of its paper equivalent.
- C. 75% of the word count of its paper equivalent.
- D. 100% of the word count of its paper equivalent.

**Question 6**

What type of information structure would suit a web site that delivers training for novice computer users? Give two reasons to support your choice.

3 marks

**Question 7**

- a. What is meant by ‘a distinct target audience’?
- b. Describe two ways you would tailor content to this audience.

1 + 1 = 2 marks

**Question 8**

Name **two** attributes of good writing when applied to a report on a product to a group of engineers and describe each.

2 marks

**Question 9**

The following three paragraphs of text describe the same product.

Describe the style of writing used in each example.

**Kitchenmaid – T1 Toaster**

The T1 toaster is ergonomically engineered for ease of use. It has been constructed with a strong plastic outer shell for durability and long life. Its simple lines ensure it is easy to clean. It is available in a variety of colours. The toaster accommodates bread, waffles and bagels. The range of browning settings ensures perfect results every time.

**Kitchenmaid – T1 Toaster**

You will love the sleek lines of the T1 Toaster. The toaster combines a range of features to accommodate all your toasting needs with unique retro styling. Designed to look great in your kitchen, the toaster comes in five fabulous colours. Imagine sitting down to perfectly toasted piping hot waffles, crusty toasted bread or golden toasted bagels for breakfast.

**Kitchenmaid – T1 Toaster**

Double-slot digital toaster with 11 browning settings

Polycarbonate housing resists stains, discoloration, and warping

Extra-large slots accommodate bread, waffles and bagels

1 + 1 + 1 = 3 marks

**Example of practical task**

You have been asked to create a promotional web page for a new children's computer game.

The page must include a short animated sequence with the main character Bob the Bunny.

The page must also include a simple order form that calculates the total payable, based on the number of games ordered.

You have been provided with the script, a picture of the cast for the front page, some text describing the game and some body parts of Bob for the animation.

**Create the animation**

Create the animation in Flash or Director. Your animation must work in a browser and you will need to add it to your web page in a later stage. Include a storyboard of a bouncing bunny.

1. Create a background of grass and sky.
2. The animation should run for three seconds and will loop.
3. Import the bunny parts (body and two ears) and place on the left of the screen.
4. The bunny should bounce three times from the left of the stage to the right.
5. As the bunny bounces his ears flop up and down.
6. Add the bounce sound each time the bunny lands.
7. Output in a format to include in the web page.

**Create the web page**

8. Create a HTML page named index.htm.

**Use a style sheet**

9. Include the styles stored in bobstyle.css.
10. Add the heading 'Order Bob the Bunny' using the style 'bobheader'.

**Add a picture**

11. Open the picture of the cast, resize to 200 pixels wide by 100 pixels high. Save as cast.gif.
12. Include the resized picture in the page.

**Prepare the copy**

13. Open the text in bobtext.txt. The text is too long for the page. Rewrite the text in point form in approximately half the number of words.
14. Add the text to the page.

**Add the animation**

15. Include the animation.

**Implement the script**

You have also been provided with three versions of the script – for JavaScript, Lingo and ActionScript. You can implement the form in JavaScript, Director or Flash using the appropriate snippet. The final form must work in a browser. The form must allow the user to enter the number of items and display the calculated total. The form does not need to submit to another page.

Include a rough sketch of the form.

Include the snippets of code.

16. The form must allow the input of number of items.
17. The form must output the total when the user clicks on calculate. The cost of the game is \$8.
18. Insert the form in the page.