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## UNIT 8: COMPUTER ART

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### Unit Description:

This unit is designed to accredit basic competencies in using computer art software to produce and print simple artwork containing bitmapped images, text and graphics. Candidates will develop familiarity with the software to be used, along with a sound understanding of the concepts of image and text manipulation and formatting. A colour printer will be required.

### Learning Outcomes:

A candidate following a programme of learning leading to this unit will be able to:

- identify and use appropriate software correctly
- import, crop and resize images
- enter, amend and resize text
- manipulate and format page items
- manage and print artwork

### Recommended Prior Learning:

There are no requirements for Recommended Prior Learning. However candidates may find it beneficial to have completed Unit 1: Using a Computer.

### Entry Restrictions:

There are no prohibited combinations of entry.

### Assessment

Candidates are assessed by means of an OCR-set practical assignment with a duration of 2 hours. The assignment is set in a realistic scenario and is designed to allow the candidates to use their knowledge and understanding to demonstrate skill in each assessment objective in a logical and realistic way. A typical task might be to produce the artwork for a CD cover.

Candidates' work will be centre assessed and externally moderated by OCR.

In order to achieve a Pass in this unit, candidates must demonstrate skill in each assessment objective within the stated tolerance of 3 errors. Candidates who do not achieve a Pass may re-take the assessment using a different assignment.

## Unit Content – Computer Art

### Assessment Objectives

### Knowledge and Understanding

1	identify and use appropriate software correctly	
a	use appropriate application software	<ul style="list-style-type: none"><li>• identify appropriate software for the task (eg bitmapped paint or vector-based draw software)</li><li>• understand correct procedures for using chosen software</li><li>• appreciate the differences between bitmap and vector-based graphics and their uses and limitations (eg edit modes, scalability)</li></ul>
2	import, crop and resize images	
a	import and place bitmapped image(s)	<ul style="list-style-type: none"><li>• recognise common bitmap file formats (eg, .jpg, .gif) and understand how to import/paste an existing image file into artwork</li></ul>
b	crop image	
c	resize image(s) to fit	<ul style="list-style-type: none"><li>• understand the chosen software's basic image manipulation facilities (crop, resize)</li></ul>
d	create graphic shape(s)	<ul style="list-style-type: none"><li>• understand how to create simple geometric and freehand shapes using the chosen software (eg, squares, circles, rectangles, ellipses, triangles, straight and curved lines, freehand lines)</li></ul>
3	enter, amend and resize text	
a	enter text	<ul style="list-style-type: none"><li>• understand the chosen software's text editing and manipulation facilities (create, amend, resize)</li></ul>
b	amend text	
c	resize text to fit	<ul style="list-style-type: none"><li>• appreciate the difference between scalable and non-scalable text (bitmap/vector)</li></ul>
4	manipulate and format page items	
a	use specified colours	<ul style="list-style-type: none"><li>• understand how to apply colour to text and graphics using the chosen software (eg, fill, object properties etc)</li></ul>
b	rotate item	
c	flip item	<ul style="list-style-type: none"><li>• understand how to isolate and manipulate text and graphic items (eg rotate (180°, 90° clockwise, 90° anti-clockwise), flip horizontal/vertical, copy &amp; paste, delete/erase)</li></ul>
d	copy item	
e	delete item	
5	manage and print artwork	
a	create new document	<ul style="list-style-type: none"><li>• understand the document management techniques for the chosen software (file menu, open, save, save as, close)</li></ul>
b	set artwork size/resolution	
c	save document	<ul style="list-style-type: none"><li>• understand how to specify the size of artwork (in metric measurements) and appreciate the relationships between screen size, print size and resolution</li></ul>
d	save document with new filename	
e	print artwork	<ul style="list-style-type: none"><li>• understand how to print from the chosen software using default print settings</li></ul>
f	close document	

## Marking Criteria for Computer Art

In order to pass the assessment for this unit, candidates must complete the assignment without making any critical errors as defined below and with no more than three accuracy errors.

Critical errors are counted for any instance of:

- specified image is missing
- a missing block of text
- printout not in colour as specified

Accuracy errors are incurred for each instance of:

- an error in keying data (a data entry error)
- an error in completing an assessment objective

In Computer Art, data entry errors are counted per word - for a full definition see 'Errors in keying data (data entry errors)' on page 21).

### 1 identify and use appropriate software correctly

- a use appropriate application software

It is acceptable to use any computer art, drawing, painting or DTP package that allows the candidate to meet all objectives. The assignments will in general suit vector-based 'draw' software more readily than bitmap-based 'paint' software.

### 2 import, crop and resize images

- a import and place bitmapped image(s)

The image must be positioned as indicated and must not overlap any other page items.

Failing to import the image, importing the wrong image or printing with the image missing is penalised as a **critical error**. Failure to position the image as indicated is penalised as an accuracy error. If an image overlaps any other items this is penalised as an accuracy error for each item that the image overlaps.

- b crop image

The image must be cropped so all of the unwanted portion has been removed, but without removing any further content. Failure to crop all of the unwanted portion is penalised as an accuracy error.

- c resize image(s) to fit

The image must be resized as specified in the assignment. Failure to resize the image is penalised as an accuracy error. Incorrect resizing of an image is penalised as an accuracy error. The resizing of the image must be proportional if specified.

d create graphic shape(s)

The shape must be created as specified in the position specified, relative to other items. Any attributes such as line width which are not specifically mentioned in the assignment are not assessed. Failure to create the shape in the position specified is penalised as one accuracy for each incorrectly positioned shape. The shape must not be visibly distorted, a shape that is visibly distorted without the need for measurement, is penalised as an accuracy error per distorted shape.

### 3 enter, amend and resize text

a enter text

The text must be entered in the position specified. Errors in entering text are penalised as one accuracy error per word. Failing to enter any text is penalised as a **critical error**. Consistent use of upper, lower, sentence or title case is not penalised. Inconsistent use of case is penalised as an accuracy error per assignment.

b amend text

Text must be amended as specified. Failure to amend text or incorrectly amended text is penalised as an accuracy error per assignment.

c resize text to fit

The text must be resized as specified in the assignment. Failure to resize the text as specified is penalised as an accuracy error. If the text is to be resized it must remain legible.

### 4 manipulate and format page items

a use specified colours

Only primary and secondary colours will be specified in the assignment and it is suggested that candidates are discouraged from choosing anything other than the most common colours in response. Reasonable alternatives are acceptable, eg cyan instead of blue. Use of incorrect colours, with the exception of the alternatives described above, is penalised as an accuracy error for each incorrect colour.

b rotate item

The item should be rotated by the specified amount exactly, and candidates are expected to use tools within the software which achieve this. Manual rotation (eg, by dragging) resulting in an inaccurate result is penalised as an accuracy error. Candidates are penalised as an accuracy error for flipping instead of rotating.

c flip item

The item must be flipped as specified. Candidates are penalised as an accuracy error for rotating instead of flipping.

d copy item

The copied item(s) must appear identical in size and shape. Failure to copy an item is penalised as an accuracy error per assignment.

e delete item

The item must be deleted fully, without deletion of any other items. Failure to delete an item or deletion of more/less items than specified is penalised as an accuracy error.

## **5 manage and print artwork**

a create new document

b set artwork size/resolution

There is a tolerance of 6mm both horizontally and vertically on the printed size of the artwork. Candidates are expected to print on A4 paper (or equivalent) and the artwork size will be measured by its content. Failure to set the artwork size to within the stated tolerance is penalised as an accuracy error.

c save document

Candidates are not penalised for saving at the wrong time.

d save document with new filename

Candidates are penalised for using the wrong filename.

e print artwork

Printouts must be in colour and must show all page items. Printouts not in colour are penalised as a critical error.

f close document

This objective is tested by the tutor.