higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE (VOCATIONAL)

MULTIMEDIA BASICS
NQF LEVEL 2

(10040162)

20 November 2018 (X-Paper)
09:00–12:00

This question paper consists of 11 pages.

NCV

TIME: 3 HOURS
MARKS: 150

INSTRUCTIONS AND INFORMATION

1. Answer ALL the questions.
2. Read ALL the questions carefully.
3. Number the answers according to the numbering system used in this question paper.
4. Start each question on a NEW page.
5. Write neatly and legibly.

NC(V)

SECTION A

QUESTION 1

1.1 Give ONE word or words for each of the following descriptions by choosing a word or words from the list below. Write only the word or words next to the question number (1.1.1–1.1.15) in the ANSWER BOOK.

play head; streaming; key light; narration; visibility; modelling; storyboard; length; stage; drawing; S. Blackton; Adobe Photoshop; fill light; specular; Walt Disney; flash

1.1.1 Part of the program window where the content of the animation is composed and manipulated

1.1.2 Duration of animation consisting of the number of frames

1.1.3 Vertical red marker in the timeline showing the current frame

1.1.4 Series of sketches used as a guide for making a show or a movie

1.1.5 Using software to create 3D computer models of characters, props and sets

1.1.6 Allowing a movie to begin playing before entire file has downloaded

1.1.7 Shines directly on the subject to highlight form and dimensions. Also defines strength, colour and angle of overall lighting design

1.1.8 Shines on the subject from side angle, illuminating shaded surfaces and reducing shadows on actors' faces

1.1.9 An important function of stage lighting

1.1.10 Most important skill when one wants to pursue a career in animation

1.1.11 Known as the father of animation

1.1.12 Popular software used for animation

1.1.13 Adding voice to explain action in a movie

1.1.14 Software which helps when creating and adjusting colours for textures

1.1.15 Often described as a mirror-like reflection of light from a surface

(15 × 1) (15)

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1.2 Indicate whether the following statements are TRUE or FALSE. Choose the answer and write only 'True' or 'False' next to the question number (1.2.1–1.2.15) in the ANSWER BOOK.

1.2.1 Hue is an attribute describing a pure colour.

1.2.2 Hierarchy means the designs are ordered, ensuring less important elements are always seen first.

1.2.3 Noise can be described as distortions in an image that can create a grainy appearance.

1.2.4 A digital image is composed of a finite number of elements, each of which has a particular location or value.

1.2.5 Applying a bright, bold colour to a significant feature in a design will highlight and draw the eye to it, making it a focal component within the design.

1.2.6 Remember to keep the most important objects in the layout the largest.

1.2.7 Compression processing is used to improve the viewing quality of the image.

1.2.8 Analogue image processing is fast, precise and flexible.

1.2.9 Image enhancement is the process of extracting information from the image.

1.2.10 A template is a general layout and design often used as a starting point for new documents.

1.2.11 Image compression is used to make the image look better.

1.2.12 Type face is a term used to define the full range of characters in the entire font family.

1.2.13 Segmentation is the initial step in any image processing technique.

1.2.14 Tonal distribution refers to a process allowing the redistribution of tones to lighten or darken an image.

1.2.15 Digital image processing deals with manipulation of digital images through a digital computer.

(15 × 1) (15)

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1.3 Various options are given as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question number (1.3.1–1.3.10) in the ANSWER BOOK.

1.3.1 The production team of an animation film uses a storyboard to ...

A finish off the production.
B help the team visualise the locations, characters and actions of the actors in the script.
C market the finished film to viewers.
D find a way to pay the crew members.

1.3.2 Animation can be defined as ...

A the art of showing pictures fast.
B the process of making films in which drawings or puppets appear to move.
C a delayed movie.
D a movie made up of pictures only.

1.3.3 The flat screen television uses this digital colour model for its screen display:

A LCD
B Bright
C RGB
D CMYK

1.3.4 The advantage of vector images over bitmap images is that ...

A vector images are much bigger than bitmap images.
B bitmap images can be more easily animated than vector images.
C vector images can be easily resized without loss of quality.
D vector images contain colour while bitmap is black and white.

1.3.5 Generally multimedia systems can be grouped into TWO main categories namely ...

A development and playback systems.
B video and sound systems.
C animation and film systems.
D analogue and digital photography systems.

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1.3.6 An animator draws an animal chased by a lion and then converts the drawings into an animated movie. This is an example of ...

A a 3d animation.
B an advanced animation.
C a 2d animation.
D a digital movie animation.

1.3.7 In the engineering field multimedia is used for ...

A entertainment.
B games.
C online banking.
D computer-aided design.

1.3.8 Which of the following is NOT a file format for text?

A .swf
B .txt
C .doc
D .docx

1.3.9 Which one is NOT a file format for audio?

A .wav
B .psd
C .wma
D .au

1.3.10 Which software application could be used to edit a picture?

A MS Paint
B MS Access
C MS DOS
D MS Excel

(10 × 1) (10)

1.4 Choose the correct word or words from those in brackets. Write only the missing word or words next to the question number (1.4.1–1.4.10) in the ANSWER BOOK.

1.4.1 The amount of light or darkness on a photograph is known as (sharpness/exposure).

1.4.2 The amount of light passing through a lens is defined by the (aperture/film speed).

1.4.3 The (F-numbers/pixels) measures aperture in photography.

1.4.4 A photograph, movie or video taken at close range and showing the subject on a large scale is known as a (portrait/close-up).

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1.4.5 The (view finder/lens) is that part of a camera that indicates the view that is seen by the camera lens.

1.4.6 The (framing/autofocus) setting allows the camera to choose the correct focus distance for the photographer.

1.4.7 The button at the top of the camera used to take the picture is called the (shutter release/shutter speed).

1.4.8 A camera lens that magnifies the image is (an exposure lens/a zoom lens).

1.4.9 A (filter/tripod) is a three-footed stand often used to balance a camera.

1.4.10 (Exposure/Focus) is the total amount of light that is captured.

(10 × 1) (10)
[50]

TOTAL SECTION A: 50

SECTION B

QUESTION 2

2.1 Read the extract below and answer the questions.

THE ARROGANT KING

Once there was a kingdom which was ruled by a tyrant king. He was so arrogant that he couldn't stand praise for anyone else except for himself.

At some time a priest who was wise and kind lived in the kingdom. He was respected throughout the kingdom because he helped people by giving wise advice.

Soon stories about the wise priest reached the king through his loyal ministers. The king become jealous of him and decided an evil plan.

He sent his guards to invite the wise priest to his palace. Public announcements about the visit were made throughout the kingdom.

On the day the whole kingdom assembled at the command of the king. The wise priest came with a smiling face. The King told the priest that he had heard about his wisdom and wanted to see it for himself.

The king said, 'I shall ask you question.'
The wise priest smiled in response.

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The king indicated a black cloth bag in his hand. 'Tell me what is in my hand?'

The wise priest replied, 'You are holding a bird inside that bag...'

The king was little surprised yet coolly replied, 'Yes, you are right. Now tell me if the bird is alive or dead. If you are a wise man you will be able to answer.'

The king had planned to crush the bird if the wise priest should say it was alive and if he should say that it was dead he would show everyone a live bird.

The king thought that whatever the priest answered, he, the king, would be the winner.

'My king, the bird is in your hand. You can decide if it's alive or dead,' replied the wise priest.

2.1.1 Identify the hero in story. (1)

2.1.2 State the category to which this story belongs. (2)

2.1.3 Describe any TWO characteristics that make this story a good television drama. (2 × 2) (4)

2.1.4 Identify the protagonist in this story. (1)

2.1.5 Identify the antagonist in this story. (1)

2.1.6 Explain any TWO conflicts in the story. (2 × 2) (4)

2.1.7 Describe the role the bird in the black bag plays in this story. (2)

2.2 Discuss the purpose of text in multimedia. (2)

2.3 Briefly discuss any THREE guidelines for text as communication in multimedia. (3)

[20]

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QUESTION 3

3.1 Different levels of typographic hierarchy make the design easier to read and visually more appealing.



3.1.1 How many design levels can you identify in the layout above? (1)

3.1.2 Discuss each of the design levels and indicate why every good design layout should include these levels.
(3 × 3) (9)

3.1.3 Identify any ONE of the font styles used in this design. (1)

3.1.4 Name any FOUR font types that may be used in design work. (4)

3.1.5 List any FIVE advantages of digital audio recording equipment. (5)
[20]

QUESTION 4

4.1 Explain FOUR types of noise that could be encountered when using analogue recording equipment. (4 × 2) (8)

4.2 List any FOUR file formats that could be used to save sound on a personal computer after using digital recording equipment. (4)

4.3 State any THREE sound effects a producer might use in a movie. (3)

4.4 Discuss how each of the following will affect the quality of recorded sound:

4.4.1 Distortion

4.4.2 Lossy compression
(2 × 2) (4)

4.5 Define the term *tweening* as used in animation. (1)
[20]

QUESTION 5

5.1 Study the photographs below and answer the questions.



A



B

5.1.1 Identify the camera angle used for A. (1)

5.1.2 Briefly discuss the camera angle used for B. (2)

5.1.3 Identify a framing technique that could be used for B. (2)

5.2 Name any FOUR types of photographic filters that can be used in photographic work. (4)

5.3 Briefly explain the purpose of a hot-shoe mounted flash. (3)

5.4 Define *portrait photography*. (2)

5.5 Explain the purpose of each of the following settings on a digital camera:

5.5.1 Manual mode (M)

5.5.2 Program mode (P)

5.5.3 Automatic mode (AUTO)

(3 × 2) (6)

[20]

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QUESTION 6

6.1 Explain how multimedia can be applied in each of the following areas:

6.1.1 Entertainment

6.1.2 Education

6.1.3 Corporate communications

6.1.4 Online training/learning

(4 × 2) (8)

6.2 Define *landscape photography*. (2)

6.3 Discuss why it is important to observe the following aspects during landscape photography:

6.3.1 Perfect location

6.3.2 Correct light

6.3.3 Focal point

(3 × 2) (6)

6.4 How can each of the following lighting systems be used to design 3D objects for an animated cartoon movie?

6.4.1 Spotlights

6.4.2 Direct light

(2 × 2) (4)
[20]

TOTAL SECTION B: 100
GRAND TOTAL: 150

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