higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE (VOCATIONAL)

MULTIMEDIA BASICS
NQF LEVEL 2

(10040162)

9 March 2020 (Y-paper)
13:00–16:00

This question paper consists of 9 pages.

335Q1S2009

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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.

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SECTION A

QUESTION 1

1.1 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 (1.1.1–1.1.15) in the ANSWER BOOK.

1.1.1 The following are paper orientation positions which could be used for the layout of a design.

A A4 and A5
B Portrait and landscape
C Newsprint and white bond
D Glossy and photo paper

1.1.2 A drawing is started with …

A simple shapes laid out in composition.
B the colours being mixed and ready for application.
C all the important details.
D the separation between lights and darks.

1.1.3 The highlight of a drawing is …

A the darkest part of a drawing.
B just a moment of thoughtfulness.
C the lightest part of a drawing.
D that area of the drawing which has all the values and tones.

1.1.4 When doing a drawing with pencil, the artist shows the intensity of colour by ...

A properly mixing all the colours on a pallet.
B using the correct brushes.
C using a series of grey values and textures.
D using dingbats to represent the correct values.

1.1.5 During the development process of a drawing the artist must show the light source ...

A as a shadow.
B coming from a definite direction.
C in a negative form.
D as an overhead.

1.1.6 Negative space on a layout like a poster can be defined as ...

A space areas outside images and text blocks.
B areas that are fully covered by images.
C areas that are occupied by text.
D spaces that are found inside pictures.

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1.1.7 A good logo should ...

A be able to be applied in digital media.
B not be easily recognisable.
C include all the current fashion trends.
D only be presented in colour.

1.1.8 The … is the line upon which most letters 'sit'.

A X-height
B cap height
C baseline
D ascender

1.1.9 A … is the portion of a letter that extends below the baseline of a font.

A baseline
B descender
C X-height
D ascender

1.1.10 ... refers to a consistent degree of increase/decrease of space between letters to affect density in a line or block of text.

A Leading
B Tracking
C Kerning
D Typography

1.1.11 Text that is aligned along the right margin is called … alignment.

A left
B right
C justified
D center

1.1.12 The art or procedure of arranging type or processed data is called …

A cinematography.
B typing.
C typography.
D texting.

1.1.13 To increase or decrease space between characters or lines of text.

A Sans serif
B Kerning
C Drop cap
D Alignment

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1.1.14 ... lines evoke feelings of safety, softness, warmness and being loved:

A Vertical
B Curved
C Zig-zag
D Horizontal

1.1.15 Identify the typeface represented below:

Multimedia

A Sans Serif
B Serif
C Slab
D Capital letters

(15 × 1) (15)

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 (1.2.1–1.2.10) in the ANSWER BOOK.

1.2.1 Aperture is the size of the opening in the lens.

1.2.2 A dark photo is considered to be overexposed.

1.2.3 Ambient light is the light that occurs with the addition of flash or some light modifiers.

1.2.4 Aspect ratio is the ratio of height to width of an image.

1.2.5 In shutter priority camera mode the user is selecting the ISO and shutter speed, but camera is choosing the aperture to make a correct exposure.

1.2.6 Taking a good photo requires getting the right amount of light to the sensor or film.

1.2.7 The ISO determines how sensitive the camera is to light.

1.2.8 Prime or fixed lens is any lens that have an adjustable zoom and autofocus.

1.2.9 A digital camera is a camera that captures the photo on film.

1.2.10 Shutter release is the button that is pressed to take a picture.

(10 × 1) (10)

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1.3 Choose an item from COLUMN A that matches a description in COLUMN B. Write only the letter (A–K) next to the question number (1.2.1–1.2.10) in the ANSWER BOOK.

COLUMN A		COLUMN B	
1.3.1	Condensed	A	a pixel value altered by noise
1.3.2	dpi	B	the difference between the lightest and darkest regions of an image
1.3.3	Font	C	the height from the baseline to the top of the uppercase letters in a font
1.3.4	Italic	D	is the height of the lowercase letter x
1.3.5	Point	E	a narrower version of a font, used to get a maximum number of glyphs into a given space
1.3.6	WYSIWYG	F	the ratio of the width to the height of an image
1.3.7	X-height	G	an abbreviation for dots per inch
1.3.8	Cap height	H	a unit of measure in typography
1.3.9	Aspect ratio	I	an acronym for 'what you see is what you get'
1.3.10	Contrast	J	weight, width and style of a typeface
		K	a slanting or script-like version of a typeface

(10 × 1) (10)

1.4 Give ONE word or a term for each of the following descriptions by choosing a word or term from the list below. Write only the word or term next to the question number (1.4.1–1.4.15) in the ANSWER BOOK.

back light; rendering; collage; texture; rectangular; marquee tool; image histogram; environmental noise; texturiser; dodge tool; fill light; texture mapping; scan-line rendering; noise; morphing; stamp tool

1.4.1 This type of sound is usually defined as undesirable sound.

1.4.2 The noise that found inside houses or offices, caused by home appliances, computers and their accessories.

1.4.3 Rendering on a pixel by pixel basis is called …

1.4.4 Normally … describes the attributes of a surface, for example if it's coarse, smooth, wrinkled or rough.

1.4.5 The process of allocating an image or texture to a 3D surface.

1.4.6 Additional light sources assisting the key light in a scene.

1.4.7 The process of producing bitmapped images from a view of 3D models in a 3D scene is called …

1.4.8 A computer technique used for graphics and in films, in which one image is gradually transformed into another image without individual changes being noticeable in the process.

1.4.9 A light positioned behind the scene to cast light on the edges of the scene objects.

1.4.10 This tool applies texture when selected and used to create a picture.

1.4.11 This tool is used for making rectangular selections within an image.

1.4.12 Use this tool to cut out a defined area of an image, deleting or hiding the rest.

1.4.13 A piece of art made by sticking various different materials such as photographs and pieces of paper or fabric on to a backing.

1.4.14 This tool lightens up pixels when you paint.

1.4.15 A graphical representation of the tonal distribution in a digital image.

(15 × 1) (15)
[50]

TOTAL SECTION A: 50

SECTION B

QUESTION 2

2.1 List FIVE desktop publishing software programs. (5)

2.2 How could *piracy* affect an organisation that uses internet technologies? (3)

2.3 State THREE features that you should consider while designing a logo. (3)

2.4 Describe the difference between *multimedia* and *hypermedia*. (2 × 3) (6)

2.5 Briefly explain THREE advantages of using a storyboard when planning a movie or video documentary. (3)

[20]

QUESTION 3

3.1 List FOUR disadvantages of recording analogue sound onto a magnetic tape. (4 × 2) (8)

3.2 Write down steps to follow in order to record audio on a personal computer. (5)

3.3 Define the term *sound colour*. (3)

3.4 Discuss the following sound effects:

3.4.1 Echo

3.4.2 Reverb

(2 × 2) (4)

[20]

QUESTION 4

4.1 Discuss how the following types of lights could be used in 3D animation projects.

4.1.1 Omni lights

4.1.2 Directional lights

4.1.3 Spot lights

4.1.4 Area lights

4.1.5 Ambient lights

(5 × 2) (10)

4.2 Discuss the following terms with reference to 3D animation:

4.2.1 Special effects

4.2.2 Texture mapping

4.2.3 Specular reflection

(3 × 3) (9)

4.3 Name a software program you could be used for applying special effects to animation. (1)

[20]

QUESTION 5

5.1 Give a detailed description of the functions of the following parts of the analogue camera:

5.1.1 Lens

5.1.2 Camera body

5.1.3 Viewfinder

5.1.4 Shutter blades

(4 × 2) (8)

5.2 Explain the purpose of the following components of a digital camera.

5.2.1 Analogue-to-digital converter

5.2.2 Charge coupled device

5.2.3 The image sensor

(3 × 2) (6)

5.3 Identify THREE settings on the camera you will set in order to control exposure. (3 × 2) (6)

[20]

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QUESTION 6

6.1 Describe FOUR characteristics of visual storytelling that should be considered when writing a film story. (4 × 3) (12)

6.2 Discuss the following concepts with reference to visual story telling:

6.2.1 Screenplay or script

6.2.2 Scriptwriting

(2 × 2) (4)

6.3 List the TWO main digital colour models. (2)

6.4 Explain what a *keyframe* is in animation. (2)

[20]

TOTAL SECTION B: 100
GRAND TOTAL: 150

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