higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE (VOCATIONAL)

MULTIMEDIA BASICS
NQF LEVEL 2

(10040162)

8 March 2018 (X-Paper)
09:00–12:00

This question paper consists of 9 pages.

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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. Write neatly and legibly.

NC(V)

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 (1.1.1–1.1.10) in the ANSWER BOOK.

1.1.1 The small screen at the back of a digital camera that allows the user to review photos is called the …

A lens.
B LCD display.
C camera body.
D viewfinder.

1.1.2 A small camera that can fit into your pocket is called a ... camera.

A point and shoot
B DSSR
C disposable
D DSL

1.1.3 A small memory device that can be inserted into an electronic device such as a camera, is called a …

A tripod.
B SD card.
C flash drive.
D flash card.

1.1.4 The main part of a digital camera, which consist of the controls, LCD, internal image processor and the associated circuitry, is called the …

A lens.
B camera body.
C viewfinder.
D LCD display.

1.1.5 The … is the total amount of light that is captured when a photo is taken with a camera.

A shutter speed
B exposure
C focus
D aperture

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1.1.6 This function of a camera reduces blurriness and ensures that the subject is sharp when a photo is taken.

A Image noise
B Framing
C Focus
D Exposure

1.1.7 This camera setting allows the camera to choose the correct focus distance.

A Aperture
B Framing
C Zoom lens
D Autofocus

1.1.8 The distance from the centre of the camera lens to the focal point is called …

A autofocus.
B focal length.
C depth of field.
D aperture.

1.1.9 The button at the top of the camera that must be pressed to take a photograph, is called the …

A camera body.
B shutter speed.
C lens.
D shutter release.

1.1.10 The … automatically produces an instantaneous flash of artificial light to help brighten a scene that is mainly dark.

A zoom lens
B ISO rating
C flash
D tripod

(10 × 2) (20)

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1.2 Choose a description from COLUMN B that matches a term in COLUMN A. Write only the letter (A–Q) next to the question number (1.2.1–1.2.15) in the ANSWER BOOK.

COLUMN A		COLUMN B	
1.2.1	Megapixel	A	technique to reduce the blurring effects of a camera
1.2.2	ISO	B	a lens that can photograph a wide area
1.2.3	Image stabilisation	C	records all the details for exposure, white balance and more
1.2.4	Angle lens	D	refers to the shape or format of the image produced by a camera
1.2.5	Macro lens	E	refers to image overexposure; leads to complete loss of detail
1.2.6	RAW picture	F	equal to one million pixels
1.2.7	Selfie	G	captures a subject at life size or larger
1.2.8	Anti-shake	H	denotes how sensitive the image sensor is
1.2.9	Aspect ratio	I	a self-portrait
1.2.10	Blowout	J	refers to image stabilisation
1.2.11	Saturation	K	depth of the colours within a photographic image
1.2.12	Color temperature	L	a scale for measuring the quality of light
1.2.13	Cropping	M	a feature of SLR cameras
1.2.14	Panning	N	a method of moving the camera in line with a moving subject
1.2.15	TIFF	O	a facility that adjusts the lens of the camera to make the image look closer
		P	an image format that is commonly used in publishing
		Q	altering the boundaries of a photograph, negative or digital image

(15 × 1) (15)

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1.3 Complete the following sentences by writing down only the missing word or words next to the question number (1.3.1–1.3.10) in the ANSWER BOOK.

1.3.1 A scene in a film or story set in a time earlier than the main story, or that happened in the past, is called a …

1.3.2 … is also referred to as *hue*.

1.3.3 The words of a speech appearing in print is called the …

1.3.4 A … is a printed publication that is produced or issued periodically (e.g. monthly). It usually specialises in a particular subject and contains pictures, stories, articles etcetera.

1.3.5 A … shows the relationship between primary, secondary, tertiary and complementary colors. It is usually in the shape of a circle which is divided equally into 12 sections.

1.3.6 The … colour model is a subtractive colour model which is used for printing.

1.3.7 ... animation is a type of animation that focuses on creating characters, storyboards and backgrounds in a two-dimensional environment.

1.3.8 The written text of film, including instructions for the actors and directions for filming, is called a …

1.3.9 A series of drawings or pictures that show the changes of scenes and actions for a movie is called a …

1.3.10 ... is the integration of multiple forms of media and includes text, graphics, audio, video, animation and sound.

(10 × 1) (10)

1.4 Indicate whether the following statements are TRUE or FALSE. Choose the answer and write only 'true' or 'false' next to the question number (1.4.1–1.4.5) in the ANSWER BOOK.

1.4.1 Using a hotspot allows the reader to click onto a word or image to get information.

1.4.2 A 32-bit image is associated with 256 colours.

1.4.3 Computer games can be played on a desktop.

1.4.4 Making use of a lot of different font styles on one page will create a good design.

1.4.5 Animation can be saved as a video file under the digital file extension .mpeg.

(5 ×1) (5)

[50]

TOTAL SECTION A: 50

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SECTION B

QUESTION 2

Read the story below and answer the questions.

Jim was about to graduate from college. For a long time, he used to admire a very beautiful sports car. He knew that his father could afford to buy it so he told him that he wanted that car. As graduation day drew nearer, he waited for signs that his father had bought him the car. Finally, graduation day arrived.

On the morning of the graduation Jim's father called him to his study. There he told his son how proud he was to have such good son and how much he loved him. After telling him this, he handed Jim a wrapped gift box as a graduation present.

Curious, Jim opened the gift box. He found a Bible with a beautiful leather cover. Angrily, Jim raised his voice and said to his father, 'With all the money you have, father, you bought me just a Bible?' He left the house at that instant, leaving the Bible behind.

Years passed by and Jim never returned home. In time, he became a very successful businessman, with a beautiful home and family.

Years later he came to the realisation that he should go and see his father - he had never returned after leaving the house on his graduation day. As he was making arrangements to return home to his father, Jim received an email from the family lawyers, informing him of his father's death. His father, in his will, had left all his possessions to Jim, his son. Jim needed to go home as soon as he could to take care of things.

On reaching home, Jim's his heart was filled with sadness and regret. He began searching for important papers, and saw that the Bible his father had given him as a gift on his graduation day, was still as new as he had left it years ago.

With tears in his eyes he opened the Bible and began to turn the pages. As he was reading the words in the Bible, a car key suddenly dropped from an envelope which had been stuck at the back of the Bible. The car key had a tag with a dealer's name on it, the same dealer which all those years ago had the sports car he so desired. The date on the tag was the date of his graduation. The words written on the tag read: 'PAID IN FULL'.

2.1 Who is the central character in the story? (1)

2.2 Identify, and briefly explain, the main type of conflict in this story. (2 × 1) (2)

2.3 Name TWO other types of conflict found in stories, excluding the type of conflict mentioned in QUESTION 2.2. (2)

2.4 Name, and discuss, FOUR elements of fictional storytelling. (4 × 2) (8)

2.5 Give TWO examples of non-fictional stories. (2)

[15]

QUESTION 3

Design a poster to advertise a sports day at your college. The poster must be attractive as well as informative. The poster design will be evaluated according to the following guidelines:

3.1 The use of suitable font styles (3)

3.2 The use of colour in the design (3)

3.3 The use of elements and principles of design (3)

3.4 Making use of negative space (3)

3.5 The use of different type sizes in the design (3)

3.6 Layout of the poster and the overall impression (5)
[20]

QUESTION 4

4.1 Explain the function of the following tools in audio software:

4.1.1 Equalizer

4.1.2 Normalizer

4.1.3 Fade-in and fade-out

(3 × 2) (6)

4.2 Name any TWO sources of noise that could interfere when recording audio. (2)

4.3 Explain the difference between a *lossy sound format* and a *lossless sound format*. (2 × 2) (4)

4.4 Give THREE examples of sound effects that could be used in an audio track. (3)
[15]

QUESTION 5

5.1 The marketing department at your college requested your help in publishing a small 10-page weekly newspaper for the college. The paper will consist of pictures, student news and upcoming events.

5.1.1 Give THREE reasons why it would be better to use desktop publishing software than word processing software for this project. (3)

5.1.2 Name any TWO formats for saving images. (2)

5.1.3 List THREE computer system requirements that you might need for this project. (3)

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5.1.4 Name THREE specific items of hardware equipment needed for this project. (3)

5.1.5 Give TWO examples of desktop publishing software. (2)

5.2 What is the difference between *vector images* and *raster images*? (2 × 2) (4)

5.3 Give ONE example of a vector image and ONE example of a raster image. (2)

5.4 What format should be used to create a digital newspaper? (1)
[20]

QUESTION 6

6.1 Multimedia is used in almost every sector of our modern society. Discuss how multimedia is being used in the following sectors:

6.1.1 Education

6.1.2 Health

6.1.3 Business

6.1.4 Entertainment

(4 × 3) (12)

6.2 Explain the meaning of *interactive*. (3)
[15]

QUESTION 7

7.1 Explain the following terms used in 2D animation:

7.1.1 Flipbook

7.1.2 Tweening

7.1.3 Key frame

7.1.4 Frame rate

7.1.5 Looping

(5 × 2) (10)

7.2 Give any TWO advantages of using animation on a webpage. (2)

7.3 List THREE important aspects of 3D graphics. (3)
[15]

TOTAL SECTION B: 100

GRAND TOTAL: 150

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