higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE (VOCATIONAL)

MULTIMEDIA BASICS
NQF LEVEL 2

9 March 2020

This marking guideline consists of 8 pages.

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SECTION A

QUESTION 1

1.1	1.1.1	B
	1.1.2	A
	1.1.3	C
	1.1.4	C
	1.1.5	B
	1.1.6	A
	1.1.7	A
	1.1.8	C
	1.1.9	B
	1.1.10	B
	1.1.11	B
	1.1.12	C
	1.1.13	B
	1.1.14	B
	1.1.15	B

(15 × 1) (15)

1.2	1.2.1	True
	1.2.2	False
	1.2.3	False
	1.2.4	True
	1.2.5	True
	1.2.6	True
	1.2.7	True
	1.2.8	False
	1.2.9	False
	1.2.10	True

(10 × 1) (10)

1.3	1.3.1	E
	1.3.2	G
	1.3.3	J
	1.3.4	K
	1.3.5	H
	1.3.6	I
	1.3.7	D
	1.3.8	C
	1.3.9	F
	1.3.10	B

(10 × 1) (10)

1.4	1.4.1	Noise
	1.4.2	Environment
	1.4.3	Scan-line
	1.4.4	Texture
	1.4.5	Texture mapping

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1.4.6 Fill light
1.4.7 Rendering
1.4.8 Morphing
1.4.9 Back light
1.4.10 Texturiser
1.4.11 Recta marque tool
1.4.12 Crop tool
1.4.13 Collage
1.4.14 Dodge tool
1.4.15 Image histogram

(15 × 1) (15)
[50]

TOTAL SECTION A: 50

SECTION B

QUESTION 2

2.1
- Adobe InDesign
- Adobe PageMaker
- Calamus
- Corel Draw
- Corel Ventura
- First Publisher
- FrameMake
- InPage
- Microsoft Publisher
- PagePlus
- PageStream
- Prince XML

(Any 5 × 1) (5)

2.2 Piracy refers to the unauthorised duplication✓ of copyrighted content✓ that is then sold at substantially lower prices in the 'grey' market.✓ The ease of access to technology like the internet✓ has meant that over the years, piracy has become more rampant and easy to perform. For example, CD writers✓ are available off the shelf at very low prices, making music✓ piracy a simple affair.✓ Piracy is done in many ways like video piracy, cable piracy and DVD/CD piracy.✓ (Any 3 × 1) (3)

2.3 A logo is the smallest entity that symbolises a company.✓ It is often treated as marketing material.✓ Designing a logo for a company demands great observation and creativity.✓ A logo should be designed in such a way that a common man can easily relate it with the company.✓ A logo should be memorable and eye catching. It should help in growing the company name into a brand.✓ (Any 3 × 1) (3)

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2.4 Hypermedia is an extension to hypertext,✓ or the ability to open new Web pages by clicking text✓ links on a Web browser.✓ Hypermedia extends upon this by allowing the user to click images, movies, graphics✓ and other media apart from text to create a nonlinear network of information.✓ (Any 3 × 1)

Multimedia is the field concerned with the computer-controlled✓ integration✓ of text, graphics, drawings, still and moving images (Video), animation,✓ audio and any other media where every type of information can be represented, stored, transmitted and processed digitally.✓ (Any 3 × 1)
(3 × 2) (6)

2.5
- The SME or the product team will get an overview of the screen just with one look.
- Based on the visual ideas given in the storyboard, the production team can improvise on the design ideas provided by the ID.
- Most information can be compressed and summarized visually instead of presented through lengthy textual instructions.
- Using visuals in storyboards illustrates the interface in the way it responds to user's inputs; this helps SMEs to understand the course clearly before its development.
- Visual storyboard makes it easier for the production team to integrate various course elements such as the content, graphics and animation to create the final eLearning course. (Any 3 × 1) (3)

[20]

QUESTION 3

3.1
- Special equipment must be purchased and set up for recording and storing data. The data can only be read on the special equipment.
- If the data is stored near a strong magnetic field or a large speaker, the tape can be damaged.
- Magnetic tape has a lifespan of 15 years. Data quality gradually erodes over time.
- It is necessary to keep older tape equipment just to be able to read the stored data.
- Data can be accessed much slower than on normal computer hard drives.

(Any 4 × 2) (8)

3.2 Download any sound editing software✓ e.g. Audacity✓ or open Sound Recorder in Windows.✓ Open the software.✓ Click Start Recording.✓ Play the audio you want to record✓ (voice, sound, music, any audio).✓ Save the recording.✓ (Any 5 × 1) (5)

3.3 Tone colour,✓ also known as timbre,✓ is the quality of a sound✓ that is not characterised as frequency (pitch),✓ duration (rhythm),✓ or amplitude (volume).✓ Generally speaking, tone colour is what allows a listener to identify✓ a sound as being produced by a specific instrument✓ and to differentiate between instruments of the same type.✓ (Any 3 × 1) (3)

3.4 3.4.1 A repeated sound✓ that is caused by the reflection of sound waves✓ from a surface.✓ The sound is heard more than once because of the time difference✓ between the initial production of the sound waves and their return from the reflecting surface.✓ A wave that carries a signal and is reflected.✓ (Any 2 × 1)

3.4.2 A reverberation,✓ or reverb, is created when a sound or signal is reflected✓ causing a large number✓ of reflections to build up✓ and then decay✓ as the sound is absorbed by the surfaces of objects in the space✓ – which could include furniture, people and air.
(Any 2 × 1)
(2 × 2) (4)
[20]

QUESTION 4

4.1 4.1.1 A point light casts illumination outward✓ in every direction✓ from a single,✓ infinitely small point✓ in 3D space.✓ Point lights are useful for simulating✓ any omnidirectional light source:✓ Light-bulbs, candles, Christmas tree lights, etc.✓ (Any 2 × 1)

4.1.2 Unlike point lights, which occupy a specific location in the 3D scene, a directional light is meant to represent an extremely distant light source✓ (like the sun or moon).✓ Rays cast from directional lights run parallel✓ in a single direction from every point in the sky✓ and are typically used to simulate direct sunlight.✓
(Any 2 × 1)

4.1.3 Spot lights in 3D applications are fairly self-explanatory due to the fact that they're rather similar to their real-world counterparts. A spot light emits a cone shaped light field✓ from a single point✓ in space. Spotlights are often used for three-point studio lighting,✓ and also for simulating any light fixture where there is a distinct visual falloff from light to dark✓ -streetlights, desk lamps, overhead cone lighting, etc.✓ (Any 2 × 1)

4.1.4 An area light is a physically based light that casts directional rays✓ from within a set boundary.✓ Area lights have a specific shape✓ (either rectangular or circular)✓ and size,✓ making them very useful for simulating fluorescent light fixtures, back-lit panels and other similar lighting features.✓ (Any 2 × 1)

4.1.5 An ambient light casts soft light rays in every direction and can be used to elevate the overall level of diffuse illumination in a scene. It has no specific directionality, and therefore casts no ground shadow; however, it is not truly omnidirectional like a point light. Ambient light is relatively similar to the light experienced at dusk, just after the sun has set. (Any 2 × 1)
(5 × 2) (10)

4.2 4.2.1 Special effects are visual✓ illusions✓ in a film✓ or image,✓ or the art✓ of creating such illusions. (Any 3 × 1)

4.2.2 Texture mapping is a graphic design process✓ in which a two-dimensional (2-D) surface,✓ called a *texture map*,✓ is 'wrapped around'✓ a three-dimensional (3-D) object.✓ Thus, the 3-D object acquires a surface texture similar to that of the 2-D surface.✓ Texture mapping is the electronic equivalent✓ of applying wallpaper, paint or veneer to a real object.✓ (Any 3 × 1)

4.2.3 There are two types of reflection: specular✓ and diffuse.✓ Specular reflection is a type of surface reflectance✓ often described as a mirror-like reflection✓ of light from the surface.✓ In specular reflection, the incident light is reflected into a single outgoing direction.✓ The name specular is derived from the Latin word speculum, meaning mirror.✓
Specular reflection obeys the laws of reflection✓ and the light is reflected from a smooth surface at a definite angle. Specular reflection occurs for all polished and smooth surfaces,✓ like mirrors.✓ The angle of reflection in specular reflection is equal to the angle of incidence.✓ Rough or unpolished surfaces are not good✓ specular reflectors as they do not reflect light at the same angle as the angle of incidence.✓ (Any 3 × 1)
(3 × 3) (9)

4.3
- Autodesk
- Maya
- Adobe Flash
- 3ds Max
- Flame
- Motion Builder
- Mud-box (Any 1 × 1) (1)

[20]

QUESTION 5

5.1 5.1.1 A camera lens (also known as photographic lens✓ or photographic objective) is an optical lens✓ or assembly of lenses✓ used in conjunction with a camera body and mechanism✓ to make images of objects either on photographic film✓ or on other media capable of storing an image✓ chemically or electronically.✓ (Any 2 × 1)

5.1.2 A camera body is the primary part✓ of the digital camera, which contains the controls, the LCD, the internal image sensor, and the associated circuitry.✓ It basically contains all of the components needed to record the photograph.✓ It is also the part of the camera that you'll hold when using the camera.✓ (Any 2 × 1)

5.1.3 In photography, a viewfinder is what the photographer looks through to compose, and, in many cases, to focus the picture. Most viewfinders are separate, and suffer parallax, while the single-lens reflex camera lets the viewfinder use the main optical system.
(Any 2 × 1)

5.1.4 In photography, a shutter is a device that allows light to pass✓ for a determined period,✓ exposing photographic film✓ or a light-sensitive electronic sensor to light✓ in order to capture a permanent image of a scene.✓ A shutter of variable speed is used to control exposure time of the film.✓ (Any 2 × 1)
(4 × 2) (8)

5.2 5.2.1 ADC stands for analogue to digital converter✓ and refers to the digital camera's ability to capture reality✓ and convert it✓ into a digital file.✓ The process takes all of the colour, contrast, and tonal information of a scene✓ and adapts it into the digital world✓ by using the basic binary code of all computer technology.✓ All digital cameras are assigned an ADC number and it is given in the manufacturer's technical specifications for each model.✓ It is important to understand what ADC really is, how it works, and why it may play a role in your next camera purchase.✓ (Any 2 × 1)

5.2.2 Instead of film, a digital camera has a sensor✓ that converts light✓ into electrical charges.✓ The image sensor employed by most digital cameras is a charge coupled device (CCD).✓ Some cameras use complementary metal oxide semiconductor (CMOS) technology instead.✓ (Any 2 × 1)
(2 × 2) (4)

5.2.3 An image sensor is a solid-state device,✓ the part of the camera's hardware that captures light✓ and converts what you see through a viewfinder✓ or LCD monitor✓ into an image.✓ Think of the sensor as the electronic equivalent of film.✓ (Any 2 × 1) (2)

5.3 A photograph's exposure determines how light or dark an image will appear when it's been captured by your camera. This is determined by just three camera settings, the so-called exposure triangle: aperture,✓✓ ISO✓✓ and shutter speed.✓✓ (3 × 2) (6)
[20]

QUESTION 6

6.1

- A basic premise or idea,✓ a plot,✓ a structure,✓ engaging characters,✓ an interesting setting,✓ and a style that is appropriate for the story✓. In visual storytelling, the narrative contains these same elements✓ but is told primarily using visual media such as illustrations, photographs, or video.✓ Words may be minimal or absent altogether.✓ (Any 3 × 1)
- Authenticity.✓ Effective stories are authentic. We often think of authentic as something that has to be real, true, or accurate. However, in visual storytelling this does not mean that something has to be literally factual.✓ Authentic means connecting with the audience.✓ This can be done by showing people as imperfect or living in conditions that evoke empathy.✓ (Any 3 × 1)
- Relevance.✓ A great story may fall short with viewers if they cannot connect to it✓ in some way with their own lives. The images need to connect with the values and mind-set of viewers.✓ It does not have to be a direct or real-life connection but something that speaks to their own views, values, hopes, dreams, or fears.✓ Maybe it is addressing the concerns of old age.✓ Most people do not want to look old. Or perhaps it has to do with a social issue of personal concern like civil rights.✓
- The sensory experience.✓ Visual storytelling relies primarily✓ on our sense of sight.✓ Depending on the medium, such as video, words and sound✓ can also be part of the equation but if the visual component does not engage the audience, nothing else will matter.✓ (Any 3 × 1)

(4 × 3) (12)

6.2 6.2.1 The script of a film, including acting instructions✓ and scene directions✓ is a written work✓ by screenwriters✓ for a film, video game, or television program.✓ These screenplays can be original works or adaptations from existing pieces of writing.✓ In them, the movement, actions, expression, and dialogues✓ of the characters are also narrated.✓ A screenplay written for television is also known as a teleplay.✓ (Any 2 × 1)

6.2.2 Screenwriting, also called scriptwriting,✓ is the art and craft of writing scripts for mass media✓ such as feature films, television productions or video games.✓ It is frequently a freelance profession. (Any 2 × 1)

(2 × 2) (4)

6.3 RBG✓ and YMCK✓ (2)

6.4 The first of a set of frames created that define the most important moments of a movement. (2)

[20]

TOTAL SECTION B: 100
GRAND TOTAL: 150

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