

INTRODUCTION TO ICT RESOURCES

JULY 2018

MAXIMUM MARKS: 100

PART ONE

1. Each question below gives multiple choices of answers. Choose the most appropriate one and enter in the "OMR" answer sheet supplied with the question paper, following instruction therein.
 - 1.1 A page or site on the World Wide Web, where you can weave the elements of multimedia into documents with _____
 - (A) HTML
 - (B) DHTML
 - (C) XML
 - (D) All of the above
 - 1.2 Which of the following is a collection of character of a single size and style belonging to a particular typeface family ?
 - (A) typeface
 - (B) font
 - (C) styles
 - (D) attributes
 - 1.3 JPEG compression technique is:
 - (A) Lossy
 - (B) Lossless
 - (C) Run Length Encoding
 - (D) All of the above
 - 1.4 Which of the following is a process whereby the color value of each pixel is changed to the closest matching color value in the target palette, using a mathematical algorithm?
 - (A) Morphing
 - (B) Stretching
 - (C) Dithering
 - (D) Antialiasing
 - 1.5 To make MIDI scores, which of the following software(s) are needed ?
 - (A) Notation Software's
 - (B) Sequences Software's
 - (C) Sound Synthesizers
 - (D) All of the above
 - 1.6 Which of the following is the study of the movement and motion of structure that have joints, such as a walking man.
 - (A) Kinematics
 - (B) Morphing
 - (C) Stretching
 - (D) Streaming
 - 1.7 HDTV provides high resolution in a :
 - (A) 16 : 9 aspect ratio
 - (B) 4 : 3 aspect ratio

- (C) 3 : 2 aspect ratio
- (D) 2 : 1 aspect ratio

1.8 CRT Screens draw each frame in two passes. This process is known as :

- (A) Progressive Scan
- (B) Over Scan
- (C) Interlacing
- (D) Compositing

1.9 A barcode reader can :

- (A) scan graphics into a computer
- (B) read Universal Product Code patterns
- (C) provide pressure-sensitive input
- (D) recognize spoken words when trained

1.10 How many different colors in a 8-bit image capable of representing?

- (A) 2
- (B) 16
- (C) 256
- (D) 65,536

2. Each statement below is either TRUE or FALSE. Choose the most appropriate one and enter your choice in the “OMR” answer sheet supplied with the question paper, following instruction therein.

2.1 Multimedia presentations can be nonlinear (interactive) or linear (passive). **FALSE**

2.2 White space is a designer’s term for roomy blank areas, while programmers call the invisible character. **TRUE**

2.3 Using illustrator or Corel Draw, You can create mainly raster type of graphics. **TRUE**

2.4 Because of the file size advantage, web pages that use vector graphics as SVG files or in plug-ins such as Flash which download faster and, when used for animation, draw faster than pages displaying bitmaps. **TRUE**

2.5 MP3 incorporates a “lossless” compression algorithm to save space. **TRUE**

2.6 The smaller the object in the path-based 2-D animation, the slower it can move. **TRUE**

2.7 Chroma keys allow you to choose a color or range of colors that become transparent, allowing the video image to be seen “through” the computer image . **TRUE**

2.8 Word processors such as Microsoft Word and Word Perfect are powerful applications that include spell checkers, table formatters, thesauruses, and prebuilt templates for letters. **TRUE**

2.9 The more commands and functions provided in the scripting language, the more powerful the authoring system. **FALSE**

2.10 Content acquisition can be one of the less expensive and time-consuming tasks in organizing a multimedia project. **FALSE**

2. Match words and phrases in column X with closest related meaning of word(s)/phrases(s) in column Y. Enter your selection in the “OMR” answer sheet supplied with the question paper, following instructions therein.

X			Y
3.1	Multimedia elements are typically seen together into a project using. (D)	A	image maps
3.2	Use of Cascading style (CSS), preferred over the dependent HTML tag, allows you to be quite precise about font (E)	B	Key Frames
3.3	Palettes are mathematical tables that define the color of a pixel displayed on (M)	C	Audio data compression
3.4	Media players are designed to play files as soon as enough of the data is cached in your (I)	D	Framing
3.5	Cel animation artwork begins with (H)	E	Faces and sizes
3.6	The process of building a single frame from two fields is called interacting a technique that helps to prevent (L)	F	the screen
3.7	Live code from Run time Revolution (www.runrev.com) and Tool Book (www.toolbook.org) are	G	a button
3.8	If the hot spot is a graphic image designed to look like a push button or toggle switch, it is called. (G)	H	Card Based Authoring Tools
3.9	Speech encoding is an important category of (C)	I	Computer’s Butter
3.10	Larger images may be sectioned into hot areas with associated links, these are called (A)	J	Authoring Tools
		K.	Animation
		L	Flicker
		M.	Color Palette

3. Each statement below has a blank space to fit one of the word(s) or or phrase(s) in the list below. choose the most appropriate option , enter your choice in the “OMR” answer sheet supplied with the question paper, following instructions therein.

A	Anti-aliasing	B	Authoring tools	C	copyright protection
D	morphing	E	A High-Definition multimedia Interface (HDMI)	F	Path animation
G	Dots per inch	H	bandwidth	I	cross platform
J	Times new roman	K	digital signal processing (DSP)	L	clipboard
M	Tweening				

- Multimedia requires large amounts of digital memory when stored in an end user's library, or large amounts of **(H) Bandwidth** _____when distributed over wires, glass fiber, or airwaves on a network.
- (A) Anti-aliasing** _____ blends the colors along the edges of the letters (called dithering) to create a soft transition between the letter and its background.
- Operating systems have a **(L) Clipboard** _____where data such as text and images is temporarily storedwhen you cut or copy them within an application.
- Some programmes allow you to process the signal with reverberation, multitap delay, chorus, flange, and other special effects using **(K) Digital Signal Processing** _____ routines.
- in **(F) Path Animation** 2-D space increases the complexity of an animation and provides motion, changing the location of an image along a predetermined path (position) during a specified amount of time (speed).
- Many television sets today also provide a composite signal connector, an S-video connector, and **(E) A High-Definition multimedia Interface (HDMI)** connector for purely digital input.
- Failures in **(D) Morphing** _____ compatibility can consume great amounts of time as you prepare for delivery by testing and developing work around and tweaks so your project performs properly in various target environments.
- _____**(B) Authoring Tools**_____ are used for designing interactivity and the user interface, for presenting your project on screen , and for assembling diverse multimedia elements into a single , cohesive product.
- _____**(C) Copyright Protection**_____ applies to original works of authorship fixed in any tangible medium of expression.”
- _____**(M) Tweening**_____ creates in- between frames when you create the start and end frames of the animation.

5.

- (a) Multimedia is a combination of text, art, sound, animation, and video delivered to you by computer or other electronic or digitally manipulated means. List and explain the applications of multimedia.
- (b) What is the ASCII character set?
- (c) Fonts are perhaps the greatest cross-platform concern, because they must be mapped to the other machine. Explain bitmap fonts.

6.

- (a) Discuss the differences among multimedia, hypertext, and hypermedia.
- (b) To develop the system of multimedia, various hardware / software components are used. What are the hardware and software used in the development of multimedia systems?
- (c) Dynamic HTML uses Cascading Style (CSS) to define choices ranging from line height to margin width to font face. Explain the text properties used in CSS.

7.

- (a) What is sound synthesis? What are the applications of sound synthesis?
- (b) MPEG is developed for the process of compressing and saving video. How does MPEG- compressing work?
- (b) Discuss how the computer monitor image differs from a television image. List the limitations in creating for a television screen.

9

- (a) What is morphing? Write the application of morphing.
- (b) Differentiate flash and HTML.
- (c) List and explain multimedia authoring tools.