M4.2-R4: INTRODUCTION TO MULTIMEDIA

NOTE:

1. There are **TWO PARTS** in this Module/Paper. **PART ONE** contains **FOUR** questions and **PART TWO** contains **FIVE** questions.

2. **PART ONE** is to be answered in the **TEAR-OFF ANSWER SHEET** only, attached to the question paper, as per the instructions contained therein. **PART ONE** is **NOT** to be answered in the answer book.

3. Maximum time allotted for **PART ONE** is **ONE HOUR**. Answer book for **PART TWO** will be supplied at the table when the answer sheet for **PART ONE** is returned. However, candidates, who complete **PART ONE** earlier than one hour, can collect the answer book for **PART TWO** immediately after handing over the answer sheet for **PART ONE**.

TOTAL TIME: 3 HOURS   **TOTAL MARKS: 100**
(PART ONE – 40; PART TWO – 60)

PART ONE
(Answer all the questions)

1.   Each question below gives a multiple choice of answers. Choose the most appropriate one and enter in the "tear-off" answer sheet attached to the question paper, following instructions therein.   (1x10)

1.1   Any type of application or presentation that involves more than one type of media, such as text, graphics video, animation and sound is known as
A)   Desktop publishing
B)   Multimedia
C)   Hypertext
D)   All of the above

1.2   Which one of the following is not a video file extension?
A)   MP4
B)   AVI
C)   QT
D)   JPG

1.3   Which of the following file formats uses the lossy compression technique to reduce the file size of an image?
A)   JPEG
B)   GIF
C)   PNG
D)   TIFF

1.4   Which of the following features of bitmapped graphics package allow the user the ability to trick the human eye into seeing colors that cannot be represented, by placing different colored blocks of color?
A)   Dithering
B)   Anti Aliasing
C)   Increasing resolution
D)   Smoothing

1.5   Simple pictures are maps created by
A)   bitmapped graphics program
B)   painting program
C)   vector graphics program
D)   resolution program

1.6   When a program assigns 8 bits to a pixel, that pixel can display one of upto _____ color.
A)   32
B)   64
C)   256
D)   1024

1.7   When something is displayed at the same time as it is created, accessed, or imported, it is known as
A)   digital time
B)   real time
C)   online time
D)   batch time

1.8   Sound as recorded on a computer is
A)   analoged
B)   digitized
C)   animated
D)   encoded

1.9   Historically, the term "hypertext" was used when textured information was linked in ____ ways.
A)   sequential
B)   real time
C)   non-sequential
D)   linear

1.10   Music that plays on a computer, such as a radio station, but is never downloaded is known as
A)   P2P
B)   Streaming
C)   MP3
D)   Online

2. **Each statement below is either TRUE or FALSE. Choose the most appropriate one and ENTER in the "tear-off" sheet attached to the question paper, following instructions therein.** **(1x10)**

2.1 Tweening is the process of animating an object over a line or path that can be straight, jagged or curved.

2.2 Animation is used to create movements on the screen.

2.3 A graphic image file name is plant.eps. This file is a vector image.

2.4 A WAV file format has a smaller file size than a MP3 file format.

2.5 MIDI is used by the multimedia computer to produce the music.

2.6 Using Illustrator or Corel Draw, one can create vector graphics.

2.7 RGB typically uses 24 bits to represent a color.

2.8 The density of pixels on a screen is known as resolution.

2.9 The process of copying files to a CD is known as pasting.

2.10 Adobe Premier, Apple iMovie, are examples of video editing software.

3. **Match words and phrases in column X with the closest related meaning/ word(s)/phrase(s) in column Y. Enter your selection in the "tear-off" answer sheet attached to the question paper, following instructions therein.** **(1x10)**

	X		Y
	X		**Y**
3.1	Squeezes data into smaller sizes	**A.**	Gray-Scale
3.2	Used to control the manufacturing of parts	**B.**	Tweening
3.3	Used to imitate music and used with MIDI	**C.**	CAD
3.4	Changing and merging one computer image into another	**D.**	Resolution
3.5	Graphics that allow each pixel to be shown on a computer as black, white or a shade of gray	**E.**	MPEG
3.6	A video standard	**F.**	3D Animation
3.7	The density of pixels on a screen	**G.**	Compression software
3.8	The creation of moving pictures in a three dimensional digital environment	**H.**	Morphing
3.9	Refers to copy of a Flash symbol	**I.**	Instance
3.10	A add-on program to MS-Power Point that makes it possible to publish video presentations to the web	**J.**	Sequencing software
		K.	CAM
		L.	Presentation software
		M.	MP3
		N.	Producer
		O.	Substance

4. **Each statement below has a blank space to fit one of the word(s) or phrase(s) in the list below. Enter your choice in the "tear-off" answer sheet attached to the question paper, following instructions therein.** **(1x10)**

A.	Authoring	**B.**	MIDI	**C.**	TIF Animation
D.	Vector	**E.**	Tweening	**F.**	GIF animation
G.	Story board	**H.**	Raster	**I.**	RAM
J.	PNG	**K.**	Rendering	**L.**	Morphing
M.	ROM	**N.**	Dots per inch	**O.**	Copyright

4.1 If you want to enlarge/reduce an image size which differs from its original size without loss in quality then that image should be in _____ format.

4.2 _____ creates in-between frames when you create the starts and end points of the animation.

4.3 _____ is used for integrating multimedia elements, programmically or by using application software, to create a multimedia project.

4.4 _____ is a lossless file format.

4.5 Many bitmapped images in a sequence is known as _____.

4.6 A video project usually starts with an outline and a _____ that describes the action.

4.7 _____ is a standard interface that is used to send commands to instrument and sound source.

4.8 When a digital image is currently being viewed on a computer screen, it is actively loaded into _____.

4.9 DPI stands for _____.

4.10 _____ photographs, drawings, text or company logos should not be used without permission.

PART TWO
(Answer any **FOUR** questions)

5.
a) What is meant by the Multimedia and Hypermedia? Distinguish between these two concepts.
b) Why is file or data compression necessary for Multimedia activities, specially when transmitted on the Internet?
c) Define antialiasing. Describe the advantages of applying 'Antialiasing' to graphics.

(5+5+5)

6.
a) What is MIDI? In what ways can MIDI be used effectively in Multimedia application?
b) What is Codec? Explain how a Codec functions.

(8+7)

7.
a) Give a definition of a Multimedia Authoring System. What key features should such a system provide?
b) What is a Storyboard? Describe the advantages of using a storyboard.
c) What is meant by fonts? Differentiate between bitmap fonts and vector fonts.

(5+5+5)

8.
a) Give three examples of multimedia input devices.
b) What is the mechanism of digitized sound? How does the computer reconstruct sound wave from a sample data?
c) What is animation? Explain the concept of key frames in designing animations.

(5+5+5)

9. Differentiate between (any three) of the following:
a) Plain text, Formatted text and Cyper text
b) Lossless and Lossy Compression
c) Cel animation and Path animation
d) Analog sound and Digital sounds

(3x5)