

## 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 \_\_\_\_\_ refers to any type of application or presentation that involves more than one type of media, such as text, graphics, video, animation, and sound.
    - A) An executable file
    - B) Desktop publishing
    - C) Multimedia
    - D) Hypertext
  - 1.2 One of the disadvantages of multimedia is
    - A) cost
    - B) adaptability
    - C) usability
    - D) relativity
  - 1.3 The text color in a presentation should contrast with the \_\_\_\_\_ color.
    - A) CPU
    - B) frame
    - C) stack
    - D) background
  - 1.4 Images included in many software titles are called \_\_\_\_\_.
    - A) clipart
    - B) pop ups
    - C) .jpg files
    - D) .tiff files
  - 1.5 A smaller version of an image is called a
    - A) clipart
    - B) bitmap
    - C) portable network graphic
    - D) thumbnail

- 1.6 The process of planning your multimedia presentation is known as a
- A) design
  - B) storyboard
  - C) development
  - D) layout
- 1.7 In slide \_\_\_\_\_ view, you see the entire presentation displayed in miniature. This view is used to arrange the slides in your presentation, as well as, to add animations, transitions and timing.
- A) arranger
  - B) creator
  - C) shaper
  - D) sorter
- 1.8 Adding \_\_\_\_\_ to objects on your slides not only controls the flow of information, but adds interest to your presentation.
- A) background
  - B) transition
  - C) animation
  - D) pop ups
- 1.9 \_\_\_\_\_ is the special effect used to introduce each slide in a slide presentation.
- A) Animation
  - B) Bulleting
  - C) Transition
  - D) Mapping
- 1.10 A \_\_\_\_\_ can be added to your presentation and then used to go to a variety of locations. (e.g., a web address, an e-mail address, a custom show or document, just to name a few.)
- A) menulink
  - B) hyperlink
  - C) toollink
  - D) slidelink

**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 Voice Script is a multimedia element.
- 2.2 JPG is not a video file extension.
- 2.3 MP3 format has larger file size as compared to WAV file format.
- 2.4 In a multimedia project, a storyboard details the text, graphics, audio, video, animation, interactivity, and other aspects that should be used in each screen of the project.
- 2.5 A graphic image file name is tree.eps. This file is a bitmap image.
- 2.6 Codec can be hardware-based, software-based, or both.
- 2.7 Using Illustrator or CorelDraw you can create mainly raster type of graphics.
- 2.8 Authoring is the name of the function for integrating multimedia elements, programmatically and/or without programming.
- 2.9 Tweening of animation creates the in-between frames when you create the start and end points of the animation.
- 2.10 Multimedia is a combination of audio and animations.

**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	
3.1	one million pixels	A.	AVI
3.2	involves the use of live humans as stop motion characters	B.	Buffer
3.3	can be considered one particular multimedia application.	C.	Java
3.4	A Microsoft supported video format	D.	Megapixel
3.5	may be broadly divided into linear and non-linear categories	E.	RGB
3.6	MPEG stand for	F.	Resolution
3.7	the quality of an image as measured by its height and width in pixels.	G.	Modern Picture Experts Group
3.8	temporary storage space is used for a segment of the file so that data continues to flow smoothly	H.	Pixilation
3.9	a description of the primary colour in an image on a computer monitor.	I.	Multimedia
3.10	an object oriented programming language which allows for multiplatform (windows, Macintosh, linux etc.) programs.	J.	Hypermedia
		K.	Mass Media
		L.	Micropixel
		M.	Moving Picture Experts Group

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)

<b>A.</b>	Digital Audio Tape	<b>B.</b>	Vector	<b>C.</b>	30
<b>D.</b>	EMBED	<b>E.</b>	Tweening	<b>F.</b>	Encapsulated Post Script
<b>G.</b>	MP4	<b>H.</b>	Graphic Images	<b>I.</b>	Sound/Music/Audio File
<b>J.</b>	Encapsulated Part Script	<b>K.</b>	Flash	<b>L.</b>	Digital Access Tape
<b>M.</b>	ActionScript				

- 4.1 JPEG is a file format for \_\_\_\_\_.
- 4.2 \_\_\_\_\_ name of popular software used for creating 2D animation for use in web pages.
- 4.3 MP3 is an extension of a \_\_\_\_\_ file.
- 4.4 DAT is an acronym for \_\_\_\_\_.
- 4.5 \_\_\_\_\_ name of the programming / scripting language of Flash.
- 4.6 \_\_\_\_\_ HTML tag is used to insert a Flash movie in a web page.
- 4.7 If you want to enlarge/reduce an image size, which differs extensively from its original size without loss in its quality, then that image should be in \_\_\_\_\_ format.
- 4.8 EPS is an acronym for \_\_\_\_\_.
- 4.9 \_\_\_\_\_ video file format is generally used in a multimedia project in order to ensure that the video clip’s file size is as small as possible.
- 4.10 A broadcast / NTSC video requires \_\_\_\_\_ FPS for it to play smoothly.

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

- 5.**
- a) Explain the use of the following hardware components in multimedia:
    - i) Touch Screen
    - ii) Video Grabbling Card
    - iii) CD- ROM
  - b) In terms of multimedia delivery explain the difference between:
    - i) Transfer rate and average seek time
    - ii) Graphics and animation
  - c) What is Multimedia? Explain.
- (6+6+3)**
- 6.**
- a) Why will it be more appropriate to use JPEG images instead of GIF images for transmitting content over internet? Also differentiate between Lossy compression and Loss less compression.
  - b) Why are standards important for developing multimedia content? What are MPEG Standards?
  - c) Explain the concept of Video on Multimedia?
- (6+6+3)**
- 7.**
- a) What is the mechanism of digitized sound? How does the computer reconstruct sound wave from a sample data?
  - b) What is the advantage of MIDI over digitized sound?
  - c) Explain three major application of multimedia in our day to day life.
- (6+3+6)**
- 8.**
- a) What is hypermedia? Differentiate it from hyper text.
  - b) What is a multimedia authoring tool and what are its main features?
  - c) Define the following terms with respect to a video:
    - i) Flicker
    - ii) Anti aliasing
    - iii) Resolution
- (3+6+6)**
- 9.**
- a) Explain briefly the following terms:
    - i) Compression Ratio
    - ii) Multimedia User Interface
    - iii) Animation
  - b) Explain what is meant by
    - i) morphing
    - ii) tweening
- (9+6)**