M4.2-R4: INTRODUCTION TO MULTIMEDIA

NOTE:

IMPORTANT INSTRUCTIONS:

1.   Question Paper in English and Hindi and Candidate can choose any one language.

2.   **In case of discrepancies in language, English version will be treated as final.**

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

4.   **PART ONE** is to be answered in the **OMR ANSWER SHEET** only, supplied with the question paper, as per the instructions contained therein. **PART ONE** is **NOT** to be answered in the answer book.

5.   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 "OMR" answer sheet supplied with the question paper, following instructions therein.   (1x10)**

1.1   A bitmap is
A)   a graphic file format made up of small dots
B)   a specific kind of bitmap file with .BMP extension
C)   a format which windows use for desktop wallpaper
D)   All of the above

1.2   A specialized program used to create multimedia presentations is a _____.
A)   Web authoring program
B)   Desktop publishing program
C)   Multimedia authoring program
D)   Illustration program

1.3   Which of the following best describes the process of streaming?
A)   Playing audio files.
B)   Delaying playing a multimedia element until enough data has been buffered so the element can play uninterrupted.
C)   Reducing the load time of a Web page by streamlining operations.
D)   Sending packets to a Web server so improve server performance.

1.4   Which of the following is not a stage in a multimedia project?
A)   Designing
B)   Forecasting
C)   Planning
D)   Testing

1.5 _____ protection applies to the original works of authorship fixed in any tangible medium of expression.
A) Copyright
B) Governmental
C) Police
D) Public Domain

1.6 Which release of a product is typically for internal circulation only?
A) Alpha
B) Beta
C) Gamma
D) Mega

1.7 What is the primary logical unit for data storage in a CD?
A) Groove
B) Pit
C) Sector
D) Track

1.8 Sound pressure is measured in
A) Bauds
B) Bits
C) Decibels
D) Watts

1.9 If the definition for "multimedia" is "a combination of media," what is the best definition for "hypermedia?"
A) Separate media
B) Linked concepts
C) Separate concepts
D) Linked media

1.10 A common error made with presentation software is:
A) too many frames in the presentation.
B) not enough contrast between text and background.
C) not enough graphics and sounds.
D) too much emphasis on sans serif fonts.

2. **Each statement below is either TRUE or FALSE. Choose the most appropriate one and ENTER in the "OMR" answer sheet supplied with the question paper, following instructions therein.** **(1x10)**

2.1 Desktop publishing software focuses on manipulating text.

2.2 Vector images use pixels to represent images.

2.3 Windows clipboard can hold multiple pieces of information at the same point of time.

2.4 Interactivity describes how the various parts of a multimedia presentation relate to one another.

2.5 Multimedia programs are created using multimedia authoring programs such as Macromedia Director, Authorware, and Toolbox.

2.6 A design tool used to record the intended overall logic, flow, and structure of a multimedia presentation is called a graphical map.

2.7 Morphing is a common visual effect found on many Web pages in which one image seems to melt into another.

2.8 GIF format is suitable to saves a full color photograph.

2.9 Virtual reality simulates real experiences in a computer-controlled environment.

2.10 Paint programs are mainly used to create and modify vector images.

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 "OMR" answer sheet supplied with the question paper, following instructions therein.** **(1x10)**

	X		Y
3.1	Photoshop native file format	**A.**	Scaling
3.2	Compressed video file	**B.**	Translation
3.3	Device independent color model.	**C.**	Tweening
3.4	Zooming	**D.**	Resolution
3.5	Adobe Director	**E.**	MIDI
3.6	Panning	**F.**	PSD
3.7	Raw audio file format	**G.**	MPEG
3.8	Quality of sound or image is measure by	**H.**	Scale
3.9	Creating motion from still images	**I.**	HSB
3.10	Synthetic audio file	**J.**	BMP
		K.	Animation
		L.	WAV
		M.	Authoring

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 "OMR" answer sheet supplied with the question paper, following instructions therein.** **(1x10)**

A.	composite	**B.**	designing	**C.**	filters
D.	humanright	**E.**	copyright	**F.**	button
G.	interactivity	**H.**	linear	**I.**	animation
J.	audio	**K.**	authoring	**L.**	anchor
M.	motion video				

4.1 In a multimedia project with a _____ structure, users navigate sequentially from one frame to another.

4.2 Users navigate freely through the content of a project, unbound by predetermined routes in the _____ model of a multimedia project.

4.3 _____ protection applies to the original works of authorship fixed in any tangible medium of expression.

4.4 _____ are used to remove noise from an image and enhance its quality.

4.5 The term that describes a user's participation with a multimedia presentation is _____.

4.6 The connection between a multimedia presentation and a file containing a song to be played is called a(n) _____.

4.7 Clicking on special areas called _____ activates the various features of a multimedia presentation.

4.8 The creation of a storyboard is essential to the development of the project. This is the _____ step of development.

4.9 Most web sites have moving graphics called _____.

4.10 _____ is a multimedia element places the highest performance demand on the computer?

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

5.
a) What are the components of a typical sound card? Explain briefly .
b) How sound card processes WAV files?

(10+5)

6.
a) Authoring process is categorized in to several stages. Explain the functioning of those major stages.
b) Illustrate the quantization technique in JPEG compression scheme explaining its' importance.

(7+8)

7.
a) Define animation and what are its different uses?
b) What do understand by Keyframes and Tweening?
c) Differentiate between Morphing and Tweening.

(5+5+5)

8.
a) Write the steps of mp3 encoding algorithm. Can mp3 support variable bit-rate?
b) How RIFF file format is different from TIFF file Format?
c) What is MIDI? How is a basic MIDI message structured?

(6+5+4)

9. Write short notes on any **three** from the following:
a) MPEG
b) RLE Encoding
c) Anti-aliasing
d) Path Animation

(5x3)