



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF COMPUTING AND INFORMATICS

DEPARTMENT OF INFORMATICS

QUALIFICATION: Bachelor of Informatics : Bachelor of Entrepreneurship	
QUALIFICATION CODE: 07BAIF : 07BENT	COURSE LEVEL: NQF LEVEL 7
COURSE: Multimedia Applications	COURSE CODE: MMA710S
DATE: July 2024	SESSION: 2
DURATION: 2 Hours	MARKS: 70

SECOND OPPORTUNITY/SUPPLEMENTARY EXAMINATION QUESTION PAPER	
EXAMINER(S):	Mr Johnson Billawer
MODERATOR (S):	Dr. Victoria Hasheela-Mufeti

**THIS EXAMINATION PAPER CONSISTS OF 3 PAGES
(INCLUDING THIS FRONT PAGE)**

Instructions for the students

- 1. Answer ALL the questions.**
- 2. Write clearly and neatly.**
- 3. Number the answers clearly.**
- 4. The use of calculators in this course is allowed.**

QUESTION 1:

[12 Marks]

- a) Differentiate between typeface and font. (2)
- b) Discuss any five (5) typography issues that you should avoid as a Multimedia Developer when creating content. (10)

QUESTION 2:

[18 Marks]

- a) Why are vector images better than raster images? (4)
- b) Explain the concept of interlacing with regard to images and the perceived benefits it offers to the users. (3)
- c) Why is the PNG format now used in preference over the GIF format and what is the difference between the two formats? (4)
- d) *Assume that you are given a project to produce promotional materials such as posters, flyers, business cards for your department:*
- i) Which color model will you recommend for this project? (1)
- ii) Justify your option in question d (i) by stating any four (4) characteristics for this color model. (4)
- iii) Why is it important for a Multimedia Developer to know about colour models? (2)

QUESTION 3

[13 Marks]

- a) *A Lecturer wishes to use a textbook he considers to be too expensive. He makes copies of the book for the class. However, it is a copyrighted book and it is prohibited to make copies of it.*
- i) Discuss the scenario in a) and state whether it is fair use or not. Justify your argument. (3)
- b) Give an example of creative work you produced in your academic career. Justify why you classify it as creative work. (4)
- c) Where do we register creative works in Namibia? (2)
- d) Differentiate between copyright and trademark. (4)

Question 4

[27 Marks]

a) Answer the following questions relating to some multimedia elements.

i) Which two (2) elements are needed to create sound? (2)

ii) Illustrate the difference between a transverse wave and longitudinal wave with the help of a diagram. (3)

iii) Assume you are a Sound Engineer. Identify and explain any two (2) sound editing operations you will be responsible for. (4)

b) *A well-established company is considering revamping its website. The Managing Director of the company is concerned about the quality and size of the images. As the Graphic Artist, you are required to address the following:*

i) How will you address the concerned raised with regard to the quality and the size of images? (4)

ii) Why is the Managing Director an important team member on this project? (2)

c) Assume you are recording audio file, which uses a sampling rate of 44.1 KHz and a sample resolution of 16 bits. What is the minimum file size that will be created for a 3-minute recording in stereo? Show your calculations and express your answer in Megabytes. (6)

d) Assume you are recording an audio file with a sound level of 4 Hertz. What will be the effect of this on human hearing and what it is called? (2)

e) Differentiate between amplitude and frequency in relation to sound. (4)

THE END