



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI ASIKIWE EXPRESSWAY, JABI – ABUJA
FACULTY OF SCIENCES

2021 EXAMINATION

COURSE CODE: CIT742

COURSE TITLE: Multimedia Technology

CREDIT: 3 Units

TIME ALLOWED: 2.5 Hours

INSTRUCTION: Answer Question ONE and any other four (4)

Questions

Question One

- 1a i. How can Hypermedia be *experienced*? [1 mark]
- 1a. ii. Explain, in clear terms, Hypertext [1 mark]
- 1a. iii. State TWO (2) things that *Multimedia System* is required for. [1 mark]
- 1b. i. Enumerate the FOUR characteristics of a Multimedia System. [2 marks]
- 1b. ii. List some standard noise forms associated with Image Digital Signal Processing Systems. [1 mark]
- 1b. iii. What is the idea of Histogram Equalization? [1 mark]
- 1c. i. Describe Briefly the Histogram of an Image. [3 marks]
- 1c. ii. Describe briefly the history of multimedia. [3 marks]
- 1d. i. Define *Video*. [2 marks]
- 1d. ii. Briefly explain *Contrast Stretching*. [1 mark]
- 1e. i. Explain briefly Image Restoration. [2 marks]
- 1e. ii. Write short note on Multimedia [4 marks]

Question Two

- 2a. i. When can someone be said to be *experiencing Multimedia*? [2 marks]
- 2a. ii. Define *noise* in image digital processing systems. [3 marks]
- 2b. i. Describe the *process of Image Analysis* and give ONE common application of the Histogram [3 marks]
- 2b. ii. Evaluate Two-dimensional Discrete Fourier Transform (DFT) [4 marks]

Question THREE

- 3a. i. Explain comprehensively **Multimedia Application**. [2 marks]
- 3a. ii. How did the German Language Society, Gesellschaft fur Deutsche

Recognize the word's (Multimedia's) significance and ubiquitousness in 1990s?

[2 marks]

3b. i. What are the key issues that Multimedia System need to deal with?

[2 marks]

3b. ii. Write short notes on Hypermedia **[6 marks]**

Question four

4a. i. When is Interactive Multimedia said to become Hypermedia? **[1 mark]**

4a. ii. Describe JPEG Encoding? **[4 marks]**

4b. i. Explain the two basic lossy comprehension schemes? **[4 marks]**

4b. ii. Describe exclusively, Multimedia Compression. **[3 marks]**

Question Five

5a. i. State the major difference between *multimedia* and *hypermedia* **[2 marks]**

5a. ii. Write down five desirable features for a Multimedia System **[5 marks]**

5b. i. Describe in details the techniques for reducing or eliminating Noise in Image Processing **[3 marks]**

5b. ii. State the TWO operators that are closely connected to the Histogram. **[2 marks]**

Question six

6a. i. Apply any four LOSSY methods that can be applied to audio compression. **[4 marks]**

6a. ii. Mention FOUR Typical Lossless Comprehension "**Graphics**" File Formats. **[2 marks]**

6b. i. Discuss the term *Transform Coding*. **[2 marks]**

6b. ii. Evaluate the methods that are related to Human Hearing and Voice **[4 marks]**