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]**