



**National Open University of Nigeria**  
**Plot 91, Cadastral Zone, Nnamdi Asikiwe Expressway, Jabi – Abuja**  
**Faculty of Computing**  
**DEPARTMENT OF COMPUTER SCIENCE**  
**2025\_2 EXAMINATIONS**

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**COURSE CODE:** CIT463

**COURSE TITLE:** Introduction to Multimedia Technology

**CREDIT:** 3 Units

**TIME ALLOWED:** 3 Hours

**INSTRUCTION:** ANSWER QUESTION ONE (1) AND ANY OTHER THREE (3) QUESTIONS

**QUESTION 1**

- a) Describe the term “multimedia” in a computer environment”
- b) With the aid of diagram, discuss Star topology
- c) Summarize the features of Digital Audio
- d) What makes color management subjective and technical?  
Highlight the types of dedicated videoconferencing devices
- e) Outline two types of circuit in Asynchronous transfer Mode (ATM) network  
State at least four examples of application software *(25 marks)*

**QUESTION 2**

- a) Briefly describe Quality of Service (QoS)  
Distinguish Digital Audio from Analogue Audio
- b) Highlight at least two types of Authoring tools and summarize their usage  
Discuss the functions of Computer Telephony Integration (
- c) Outline the compression types commonly used in Video compression *(15 marks)*

**QUESTION 3**

- a) Explain what you understand by the term server 5 Marks
- b) List and explain the different types of specialised servers 10 Marks

**QUESTION 4**

- a) Discuss the processes of converting Analogue Audio to Digital Audio
- b) Summarize the benefits and challenges of using color
- c) State the difference between differentiated services and integrated services
- d) Describe at least three ways to create Digital Image
- e) Mention two unique ways to specify color *(15 marks)*

**QUESTION 5**

- a) Identify the limitation of Psychoacoustics model
- b) Differentiate between Wider Area Network (WAN) and Local Area Network (LAN)
- c) Explain the term “Pixel”
- d) Outline the features of Image and Digital Image
- e) Explain the term “Chromatic” *(15 marks)*

**QUESTION 6**

- a) Briefly explain the term “Peer-To-Peer Architecture”
- b) Highlight the characteristics of Metropolitan Area Network (MAN)

c) Differentiate between Real-time Transfer Protocol and Session Control Protocol  
Describe Digital Subscriber Line

d) What are the advantages and disadvantages of the Internet Telephony? (**15 marks**)