



National Open University of Nigeria
Plot 91, Cadastral Zone, Nnamdi Asikiwe Expressway, Jabi – Abuja

FACULTY OF COMPUTING

DEPARTMENT OF COMPUTER SCIENCE

2024_2 EXAMINATION

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

QUESTION 1

1a, Copy and Complete the Summary Table for Comparing the differences between types of DSL Technologies **10 marks**

1. b) Describe what a digital Image is?) (**3 marks**)
- ii Explain the following terminologies: (**7 marks**)
- c) Briefly describe Quality of Service (QoS) (**5 marks**)

QUESTION 2

- 2a). Summarize the features of Digital Audio (**5 marks**)
- 2b. i) Explain what you understand by the term server
- ii) List and explain the different types of specialised servers (**5 marks**)
- b. List and explain the different types of specialised servers (**5 marks**)

QUESTION 3

- a) Distinguish Digital Audio from Analogue Audio (**2 marks**)
- a) Highlight at least two types of Authoring tools and summarize their usage (**3 marks**)
- b). Discuss the functions of Computer Telephony Integration (**5 marks**)
- c). Outline the compression types commonly used in Video compression (**5 marks**)

Total 15 marks

QUESTION 4

- a) i) Briefly explain the concept of Psychoacoustics? (**3 marks**)
 - ii What make dedicated server better than personal computer in a network server (**2 marks**)
- Total = 5 marks)**
- b) Differentiate between Symmetric Digital Subscriber Line (SDSL) and Asymmetric Digital Subscriber Line (ADSL) (**2 marks**)
 - b Mention at least four components required for a videoconferencing system (**3 marks**)
 - c) i) Outline the major characteristics of MBONE (**3 marks**)
 - c). ii Mention at least two applications of Multicasting (**2 marks**)

QUESTION 5

- a) Discuss the processes of converting Analogue Audio to Digital Audio
- ii State the difference between differentiated services and integrated services
- 5b Summarize the benefits and challenges of using color
- c. Describe at least three ways to create Digital Image

c) Mention two unique ways to specify color (*15 marks*)

QUESTION 6

a) Identify the limitation of Psychoacoustics model

Differentiate between Wider Area Network (WAN) and Local Area Network (LAN)

b. Explain the term “Pixel”

b. Outline the features of Image and Digital Image

Explain the term “Chromatic”

c. Differentiate between VoIP vs Internet Telephon

15 Marks