



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**University Village, 91 Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja**  
**FACULTY OF SCIENCES**  
**COMPUTER SCIENCE DEPARTMENT**  
**SEPTEMBER 2020\_1 EXAMINATIONS**

**CIT 463 – INTRODUCTION TO MULTIMEDIA TECHNOLOGY**

**Credit: 3 Units**

**TIME ALLOWED: 2½ Hours**

**INSTRUCTION: Answer Question 1 and any other FOUR (4) Questions**

- 1.a) List and explain three (3) desirable features for a multimedia system. **(6 marks)**
- b) Explain the following terminologies: **(7 marks)**
- i) Integrated Development Environment. **(1.5 marks)**
  - ii) Server. **(1 mark)**
  - iii) Multimedia Hardware. **(1.5 marks)**
  - iv) Network Topology. **(1.5 marks)**
  - v) Digital Audio. **(1.5 marks)**
- c.) i.) Explain how a still image is different from video in the Multimedia System. **(3 marks)**
- ii.) Identify the needs for Multicasting in Distance Learning. **(3 marks)**
- iii.) In what way is Routing different from Bridging? **(3 marks)**
- 2 a.) With the help of a 3-column Table, explain how Star Topology is different from Mesh Topology in terms of the following features as the basis for comparison:
- i.) Organization **(2 marks)**
  - ii.) Complexity **(2 marks)**
  - iii.) Robustness **(2 marks)**
  - iv.) Cabling requirements **(2 marks)**
  - v.) Routing mechanism **(2 marks)**
- b.) Highlight five distinct components required for implementing a videoconferencing system. **(2 marks)**
- 3a) Apart from router, explain any other two most commonly used networking devices in Multimedia applications. **(4 marks)**
- b.) i) What do you understand by the term Protocol? **(2 marks)**
- ii) What are the three key elements of a Protocol in the Multimedia System? **(6 marks)**

4a) Give any four (4) reasons why the Internet Telephony is beneficial to both developers And clients. **(6 marks)**

b.) i) Briefly explain what do you understand by the term Computer Telephony Integration (CTI). **(2 marks)**

ii) Give a clear description of the two (2) different forms of Computer Telephony Integration Familiar to you. **(4 marks)**

5a) Enumerate any three (3) types of Digital Subscriber Line (DSL) you ever studied. **(6 marks)**

b.) Give the features of the following types of TV broadcast:

i) Digital Television **(3 marks)**

ii) Cable Television **(3 marks)**

6. a.) Write short notes on any two (2) of the following multimedia terminologies:

i.) Bandwidth ii.) Multicast iii.)DVD iv.) USD **(2 marks each)**

b.) With multi-media authoring software, a number of services could be rendered. Give any eight (8) of these services studied in this course. **(8 marks)**