



**NATIONAL OPEN UNIVERSITY OF NIGERIA,  
PLOT 91, CADASTRAL ZONE, UNIVERSITY VILLAGE, JABI – ABUJA  
FACULTY OF SCIENCES  
DEPARTMENT OF COMPUTER SCIENCE  
2020\_2 EXAMINATIONS**

**COURSE CODE: CIT735**

**COURSE CREDIT: 3**

**COURSE TITLE: APPLICATION SOFTWARE DESIGN AND  
MULTIMEDIA**

**TIME ALLOWED: 2<sup>1</sup>/<sub>2</sub> HOURS**

**INSTRUCTION: ANSWER QUESTION ONE (1) AND ANY OTHER FOUR (4)  
QUESTIONS**

**Question 1**

- 1)
  - (a) Explain the 3 facts that can be inferred from Multimedia based on the various definitions propounded by different scholars (*6 marks*)
  - (b) Outline at least six examples of multimedia applications (*3 marks*)
  - (c) Describe the term hypermedia (*3 marks*)
  - (d) Write out the components of interactive multimedia (*2 marks*)
  - (e) Outline two challenges of multimedia systems (*1 mark*)
  - (f) Identify common text attributes (*1 mark*)
  - (g) Discuss the following concepts in relation to multimedia application development.
    - i) Copyrights (*1 mark*)
    - ii) Testing and Debugging (*1 mark*)
    - iii) Deployment (*1 mark*)
  - (h) Describe the following Delivery Strategies:
    - i) Direct Changeover (*1 mark*)
    - ii) Parallel Running (*1 mark*)
    - iii) Phased Changeover (*1 mark*)
- 2)
  - (a) Write the category of multimedia data according to Winter 1997 (*5 marks*)
  - (b) Distinguish between Text and Graphics as data elements (*2 mark*)
  - (c) Briefly explain the term Document Structure (*2 mark*)
  - (d) Describe the term Metamedia. (*3 marks*)
- 3)
  - (a) Outline five benefits of multimedia (*5 marks*)
  - (b) Write short note on Text as a property of multimedia elements (*5 marks*)
  - (c) Distinguish between the American Standard Code for Information Interchange (ASCII) and Unicode Standard (*2 marks*)
- 4)
  - (a) Outline four important concepts in the nature of digital images (*2 marks*)
  - (b) Describe the criteria for choosing Text in multimedia (*8 marks*)
  - (c) Write a short note on cross platform issue in Text element (*2 marks*)

- 5) (a) What do you understand by Multimedia System Development Life Cycle Model? (2 marks)
- (b) Discuss the following software development models:
- i) Classic Waterfall Life Cycle (2 marks)
  - ii) Rapid prototyping Model (3 marks)
  - iii) Iterative and Incremental Model (3 marks)
  - iv) Formal methods (2 marks)
- 6) (a) Distinguish between human-computer interface and loop of interaction. (2 marks)
- (b) Describe five aspects to loop of interaction. (10 marks)