



NATIONAL OPEN UNIVERSITY OF NIGERIA
University Village, Plot 91, Cadastral Zone,
Nnamdi Azikiwe Expressway, Jabi, Abuja
FACULTY OF SCIENCES

2023_1 POP EXAMINATION

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|----------------------|-----------------------------------------------------|
| Course Code: | CIT742 |
| Course Title: | Multimedia Technology |
| Credit Unit: | 3 |
| Time Allowed: | 2 ½ hours |
| Instruction: | Answer Question 1 and any other three (3) questions |

(25 marks)

- Q1 a. Explain the following terms: (9 marks)
- (i) Synchronization
 - (ii) Digital signal
 - (iii) Analog signal
- b. List three factors that can influence input/output (I/O) performance (6 marks)
- c. Discuss five (5) desirable features of multimedia systems (10 marks)

(15 marks)

- Q2 a. List two sources of text and static data (2 marks)
- b. Discuss two key components of the RAID System (4 marks)
- c. Explain and give examples of three components of a multimedia system (6 marks)
- d. List three main authoring paradigms (3 marks)

(15 marks)

- Q3 a. Describe the concept called transform coding (3 marks)
- b. Differentiate between lossless and lossy video compression (6 marks)
- c. Mention two examples of streamed audio (2 marks)
- d. Describe the relationship between iconic/flow control and the frame authoring paradigm (4 marks)

(15 marks)

- Q4 a. Explain the term chromatics (3 marks)
- b. Outline three output devices for multimedia systems (6 marks)
- c. Explain the factor that determines a monitor's resolution (2 marks)
- d. Briefly describe two image formats (4 marks)

(15 marks)

- Q5 a. Explain with the aid of a diagram the concept of light spectra (5 marks)
- b. List three common image-coding standards (3 marks)
- c. What is a raw video? (2 marks)
- d. Explain two key issues multimedia systems need to deal with. (3 marks)
- e. State two image enhancing operations. (2 marks)

(15 marks)

- Q6. a. Describe three key issues that can potentially affect storage media (6 marks)
- b. Outline three benefits and three challenges of colour in multimedia applications (9 marks)

