



FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA  
SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY  
DEPARTMENT OF INFORMATION & MEDIA TECHNOLOGY

SECOND SEMESTER 2014/2015 EXAMINATION

**COURSE CODE:** IMT 521  
**COURSE TITLE:** MULTIMEDIA TECHNOLOGY & PROGRAMMING  
**CREDIT UNITS:** 2  
**TIME ALLOWED:** 2 Hours  
**COURSE LECTURER(S):** I. O. ALABI  
**NUMBER OF QUESTIONS:** 4  
**NUMBER OF PAGES:** 2 (INCLUDING THIS PAGE)

**INSTRUCTIONS**

- Answer all questions
- Do **not** use red pen
- Please use a clear handwriting
- This exam is closed book, closed notes, closed laptop and closed cell phone
- Please use non-programmable calculators only



1. i) What is Character encoding? (3 marks)  
ii) What are the most common encoding system? (3 marks)  
iii) What is meant by Multimedia technology? (3 marks)  
iv) Explain Linear and Non-linear multimedia. (3 marks)  
v) What are the distribution channels of multimedia contents.(3 marks)
2. i) Distinguish between digital and analogue Recording. (3 marks)  
ii) What are the advantages of digital recorded media? (2 marks)  
iii) Explain:
  - a) Data compression (2 marks)
  - b) Real-Time Audio (2 marks)
  - c) Voice recognition (2 marks)
  - d) Media streaming (2 marks)  
iv) Give any three examples each of *lossy* and *lossless* compression formats. (2 marks)
3. i) Explain Video conference and the components of video conference technology. (4 marks)  
  
ii) What are the desirable features of multimedia encryption? (6 marks)  
  
iii) Explain Unicode and Unicode Consortium? (3 marks)  
iv) What are the most common Unicode encoding systems? (2 marks)
4. i) What is meant by multimedia Digital coding? (4 marks)  
ii) Explain Source and Channel coding. (5 marks)  
iii) What is a Codec? (2 marks)  
iv) What are the performance parameters of digital coding? (4 marks)