



NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
SCHOOL OF SCIENCE AND TECHNOLOGY
MAY/JUNE 2012 EXAMINATION

CIT 791 Advanced Multimedia Technology

Time: 2½ hrs

Instruction: Answer any five (5) questions. Each question carries 14 marks

- 1a) Define multimedia system. (2 marks)
- b) Describe any four components of multimedia system (12 marks)

- 2a) What is a multimedia workstation? How is it different from the traditional workstation? (5 marks)
- b) Describe the three main forms of representing audio data (9 marks)

- 3a) Briefly describe any two home television distribution standards. How are they different? (11 marks)
- b) State any four desirable Features for a Multimedia Computer (4 marks)

- 4a) List and describe the three types of text that are processed by a multimedia computer (9 marks)
- b) State five of the challenges facing multimedia systems (5 marks)

- 5a) What is image processing? (2 marks)
- b) Briefly describe any three subclasses of image processing (12 marks)

- 6a) Write short note on digital video. (2½ marks)
- b) Describe the different types of MPEG Frames (9 marks)
- c) State the Nyquist theorem (2½ marks)

- 7a) Briefly describe the following:
- i) Discrete Cosine Transform (DCT) (5 marks)
 - ii) Discrete Fourier Transform (DFT) (5 marks)
- b) State the properties of the two-dimensional Fourier transform (4 marks)