NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWASY, JABI-ABUJA
FACULTY OF SCIENCES
DEPARTMENT OF COMPUTER SCIENCE

2020 EXAMINATIONS

COURSE CODE   **: CIT 735**
COURSE TITLE   **: APPLICATION SOFTWARE DESIGN AND MULTIMEDIA**
CREDIT UNIT   **: 2**
TIME ALLOWED   **: 2 $^{1/}_{2}$HOURS**
INSTRUCTION   **:** ANSWER QUESTIONS 1(ONE) AND ANY OTHER FOUR (4)

Question

1a (i) What are the benefits of Multimedia system?   *(4 marks)*
   (ii) State any two multimedia development tools that may be used to create stand-alone hypermedia
    applications   *(3 marks)*
1b (i) What are the challenges of Multimedia system design?   *(3 marks)*
   (ii) Briefly describe the two components of CODEC   *(3 marks)*
   (iii) Explain the concept of persistence of vision in video and animation   *(2 marks)*
1c (i) What is the basic goal of Human-Computer Interaction   *(3 marks)*
   (ii) Differentiate between Contiguity Principle and Multimedia Principle   *(4 marks)*

2a   State the essential features of multimedia computer components.   *(2 marks)*
2b   What are the four basic characteristics of multimedia system?   *(4 marks)*
2c   Each DVD-ROM discs is divided into six sections, briefly describe these sections
     (6 marks)

3a   Outline some examples of media players in multimedia application   *(6 marks)*
3b   Briefly explain the components of a multimedia editing software   *(6 marks)*

4a   Highlight the software tools that enable you to capture streaming media and convert it from one
     form into another   *(6 marks)*
 4b   Write short notes on the following text attributes
     (i) Font Type   (ii) Font Style   (iii) Font Size   *(6 marks)*

5a   The YUV color code is widely used in encoding colour for use in television and video. Explain
     the concept of YUV Colour Model   *(6 marks)*
5b   State the colour palette of the RAINBOW colours in RGB and hexadecimal code. *(6 marks)*

6a   Write short notes on the following multimedia applications:
         (i) Modelling   (ii) Animating   (iii) Rendering   *(6 marks)*

6b   Briefly describe three major conventional broadcast analog video standards used in recording and replaying still or moving images in electronic system   *(6 marks)*