



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

CIT 635 Application Software Design and Multimedia

Time Allowed: 3hrs

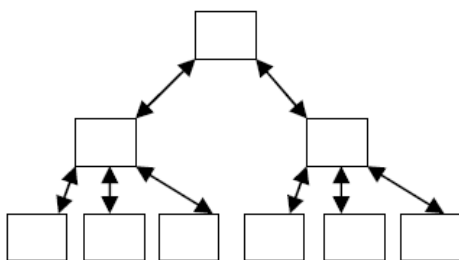
Instruction: Answer any five (5) questions

1a. State the phases of the multimedia system development life cycle. (10 marks)

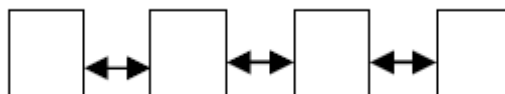
1b. What is the vital aspect to be borne in mind at the preliminary needs assessment stage? (2 marks)

1c. Identify and label the categories of design architecture below:

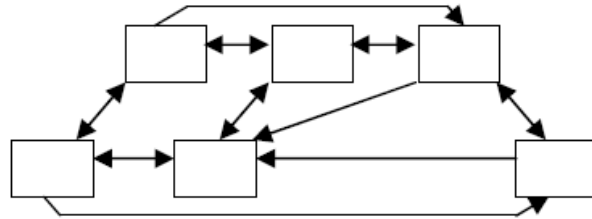
i.



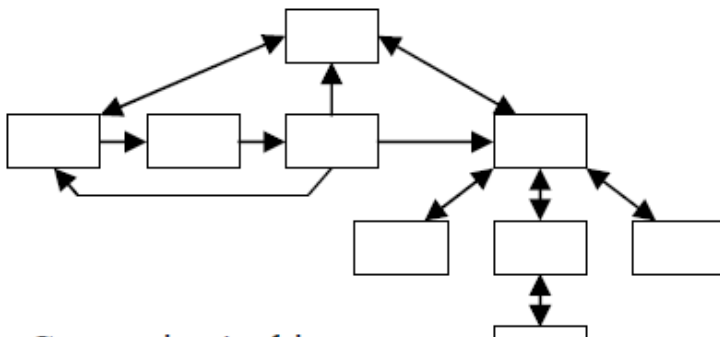
ii.



iii.



iv..



each, Total=8 marks)

(2 marks

2a. Give a brief explanation of the following terms:

:

- i. Frame)
- ii. Animating) (5 marks each, Total=15)
- iii. Rendering)

2b. Describe the concept of 'persistence of vision'

(5 marks)

3a. Draw a block diagram, illustrating the various processes involved in the animation of images.

(18 marks)

3b. What is the significance video compression in the context of Application Software Design and Multimedia?
(2 marks)

4a. Assuming a sample of 440 X 360 resolution has 32 bits per pixel; determine the raw video size of the SCAM video system that transforms at 23 frames/s
(15 marks)

4b. Explain the concept of digitization of video . (5 marks)

5a. Identify and describe by means of examples, any two facts to be deduced from the concept of multimedia. (10 marks)

5b. Give a brief explanation of four (4) essential considerations at the preliminary needs assessment stage.
(8 marks)

5c. List any two (2) components of deliverables. (2 marks)

6a. Explain the following delivery strategies using well labelled diagrams:

i. Direct changeover) 5 marks

ii. Parallel running) 5 marks

(Total = 10 marks)

6b. A basic layout has five (5) main components, list these components.
(5 marks)

6c. State five (5) ways of formatting and delivering messages in multimedia (5 marks)

7a. There are quite a number of standards used in video capturing and display,

list any two (2) of these formats. (4 marks)

7b. Write on five (5) work models in the user-centered design process. (10 marks)

7c. Outline three (3) main hardware requirements for capturing video images (6 marks)