(Knowledge for Development)

KIBABII UNIVERSITY

(KIBU)

UNIVERSITY EXAMINATIONS
2018/2019 ACADEMIC YEAR

END OF SEMESTER EXAMINATIONS
YEAR THREE SEMESTER TWO EXAMINATIONS

FOR THE DEGREE OF
BACHELOR OF SCIENCE
(INFORMATION TECHNOLOGY)

COURSE CODE   :   BIT 216
COURSE TITLE   :   MULTIMEDIA TECHNOLOGIES

DATE: 04/02/2019   TIME: 9.00 A.M. – 11.00 A.M.

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO.

QUESTION ONE (COMPULSARY) [30 MARKS]

1. You need hardware, software and _____ to make multimedia.
   A. Network   B. compact disk drive   C. good idea   D. programming knowledge

2. Multimedia elements are typically sewn together into a project using _____.
   A. authoring tools   B. multimedia tools   C. audio tools   D. video tools

3. _____ refers to any type of application or presentation that involves more than one type of media, such as text, graphics, video, animation, and sound.
   A. An executable file   B. Desktop publishing   C. Multimedia   D. Hypertext

5. A smaller version of an image is called a:
   A. clipart   B. bitmap   C. portable network graphic   D. thumbnail

6. The process of planning your multimedia presentation is known as a:
   A. design   B. storyboard   C. development   D. layout

4. _____ is the special effect used to introduce each slide in a slide presentation.
   A. Animation   B. Bulleting   C. Transition   D. Mapping

✗5. Resolution of VGA monitor is (in pixel)
   A. 640 480   B. 800 600   C. 320 440   D. 1024 768.

✗6. If frames are displayed on screen fast enough, we get an impression of
   A. Signals   B. Motions   C. Packets   D. Bits

7. In Gray scale colour mode, we get .... number of different colour.
   A. 2^{24} B. 2^8 C. 2^{16} D. 2^2

8. Space between two lines
   A. Leading   B. Kerning   C. Tracking   D. Font mapping

9. . Conversion of an analog waves to a digital format is called
   A. Echo   B. Sampling   C. Frequency   D. Sound forge

10. PAL is
    A. Digital video standard   B. Analog video standard
    C. Audio file standard   D. Image file standard

11. DPI stands for
    A. Display per inch   B. Display point intersection
    C. Dots per inch   D. Dots per intersection

12. Leading is
    A. Vertical gap between two lines   B. Horizontal gap between two lines
    C. Smallest component of the written language   D. None of these

13. Raster Scanning starts from
    A. Top left corner of the screen   B. Top right corner of the screen
    C. Bottom left corner of the screen   D. Bottom right corner of the screen

14. In which type of streaming multimedia file is delivered to the client, but not shared?
    A. real-time streaming   B. progressive download   C. compression   D. none of the mentioned

15. Which one of the following is the characteristic of a multimedia system?
    A. high storage   B. high data rates
    C. both high storage and high data rates   D. none of the mentioned

16. The delay that occur during the playback of a stream is called
    A. stream delay   B. playback delay   C. jitter   D. event delay

17. What six elements can be combined to create multimedia?
    A. Colour, hypertext, images, music, voiceover and video
    B. Audio, hypertext, images, colour, music and animation
    C. Text, links, animation, video, sound effects and music
    D. Audio, images, animation, hypertext, text and video

18. How can multimedia be displayed?
    A. Magazines, television and books   B. Computers, T.V's and Websites
    C. Magazines, newspapers and books   D. Computers, newspapers and Websites

19. _____ is an element of multimedia that uses symbols, numbers and letters to display information.
    A. Animation   B. Audio   C. Text   D. Video

20. Authoring software is software that allows you to _____ and _____ multimedia.
    A. Create, edit   B. Edit, delete   C. Copy, view   D. Copy, delete
21. A way to consider ethical factors when designing is to make sure
    A. You do not offend anyone's religious or cultural beliefs
    B. Your design physically appeals to people
    C. Your design is all your own work   D. Your design works the way it should
22. The slide _____ controls text characteristics, background color and special effects, such as shadowing and bullet style.
    A. presentation   B. master   C. show   D. sorter
23. A_____ is family of characters or letters which have similar look.
    A. bold   B. Italics   C. underline   D. typeface
24. Photographs can be converted into digital form with the help of_____.
    A. scanner   B. paint   C. printer   D. none of them
25. Computer store the pictures in the form of_____.
    B. pixel   B. character   C. point   D. picture
26. A_____ is a simple matrix of tiny dots which forms an image on the computer screen.
    A. Bitmap   B. pixelmap   C. character map   D. graphic
27. Which form of image stores the images in the form of mathematical equations?
    A. dot   B. vector   C. pixel   D. point
28. While enlarging the image, _____ image will blur while _____ image will not blur.
    A. bitmap, vector   B. vector, bitmap   C. bitmap, dots   D. none of them
29. .... is the fonts without decoration.
    A. Serif   B. Sans serif   C. Both (a) and (b)   D. None of these
30. Pixel contains values representing ....
    A. colour   B. size   C. mass   D. weight

QUESTION TWO [20 MARKS]

a. Give four common use of TEXT in Multimedia application.   [4 marks]

b. What is meant by the terms static media and dynamic media? Give two examples of each type of media. Static   [6 marks]

c. Bearing in mind the characteristics of multimedia in computing, explain whether digital television production fully qualifies to be classified a multimedia product or not.   [10 marks]

✓ QUESTION THREE [20 MARKS]

a. Explain any three disadvantages of Graphics in Multimedia product.   [6 marks]
b. Distinguish between bitmap and vector graphics by highlighting three attributes for each of them.   [6 marks]
c. Give two advantages and two disadvantages of vector graphics.   [4 marks]
d. Give two advantages and two disadvantages of bitmap graphics.   [4 marks]

QUESTION FOUR [20 MARKS]

a. Explain the difference between Animation and Video.   [4 marks]
b. Give four reasons why you think a multimedia developer can integrate animations in his/her product/application.   [4 marks]
c. Describe streaming as used in multimedia.   [4 marks]
d. Explain any four reasons why you can incorporate video in a multimedia product.   [8 marks]

QUESTION FIVE [20 MARKS]

a. Briefly explain the Factors that affect the quality of digital audio include: [6 marks]
b. Calculate the file size of a 2-minute stereo soundtrack with a sampling rate of 56,200 Hertz and sampling size of 32 bits in megabytes. [3 marks]
c. Briefly explain how you can use the following forms of sound in your multimedia product
   i. Music [3 marks]
   ii. Speech [2 marks]
d. Discuss three major challenges that may be experienced in the usage of multimedia in teaching at Kibabii University. [6 marks]