UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER II
SESSION 2014/2015

COURSE NAME	:	MULTIMEDIA TECHNOOGY
COURSE CODE	:	BNF 20203
PROGRAMME	:	2 BNF
EXAMINATION DATE	:	JUNE 2015 / JULY 2015
DURATION	:	2 HOURS AND 30 MINUTES
INSTRUCTION	:	ANSWER **ALL** QUESTIONS

THIS QUESTION PAPER CONSISTS OF **FOUR (4)** PAGES

Q1 (a) Explain briefly any **FOUR (4)** of the following elements in multimedia applications:

   (i)   Text
   (ii) Audio
   (iii) Image
   (iv) Animation
   (v)   Video

(8 marks)

(b) Discuss **THREE (3)** examples of multimedia products and applications.

(6 marks)

(c) Briefly explain advantages of using live streaming over internet network.

(6 marks)

Q2 (a) Describe the definition of multimedia authoring tools.

(4 marks)

(b) As a multimedia engineer you are required to choose an application software to edit corporate video. Analyze features that must be considered in choosing the software.

(8 marks)

(c) Explain the applications of the following softwares:

   (i)   Macromedia Flash
   (ii) Adobe Photoshop
   (iii) Adobe After Effects
   (iv) Macromedia Dreamweaver

(8 marks)

Q3   (a)   Explain briefly each of the following multimedia format files:

(i)   WAV
(ii)   MPEG
(iii)   JPEG
(iv)   GIF

(8 marks)

(b)   Website is one of the applications in multimedia technology. Discuss briefly a suitable fonts class to be used in your organization website and explain briefly the reasons of your choice.

(6 marks)

(c)   An audio signal is digitized at a sampling rate of 44.1 kHz, a bit depth of 16 and in stereo mode. Calculate the space occupied by 1 minute of the audio and its data rate for playback?

(6 marks)

Q4   (a)   Discuss the advantages and disadvantages of using Speech Recognition input and Handwritten input.

(6 marks)

(b)   A 15 inch monitor with an aspect ratio of 4:3 has a pixel addressability of 800×600 and a color-depth of 24 bits.

Calculate:

(i)   Resolution.
(ii)   Dot-pitch
(iii)   The minimum amount of display memory required on its adapter card to display image on the screen.

(10 marks)

(c)   A monitor can display 4 shades of red, 8 shades of blue and 16 shades of green. Determine the color depth supported by the monitor?

(4 marks)

CONFIDENTIAL

Q5   (a)   Differentiate the applications and features between CD-R and CD-RW.

(6 marks)

(b)   A CD-ROM contains 333000 block to be played back in 74 minutes. Calculate the data rate and capacity of the CD-ROM when operating in:

(i)   Mode 1
(ii)   Mode 2 333000 blocks are played back in 74 minutes.

(6 marks)

(c)   A multimedia engineer needs to provide an online data storage for the backup of his company. Analyse a suitable data storage device for the backup purpose in terms of performance and durability.

(4 marks)

(d)   The audio CD format requires sound to be digitized a sampling rate of 44.1 kHz and a bit-depth of 16 bits, in stereo mode. If 74 minutes of the digitized audio can be stored in a single CD, calculate the CD storage capacity.

(4 marks)

-    END OF QUESTION -

CONFIDENTIAL