# UTHM
### Universiti Tun Hussein Onn Malaysia

# UNIVERSITI TUN HUSSEIN ONN MALAYSIA

# FINAL EXAMINATION
## SEMESTER II
## SESSION 2014/2015

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|---|---|---|
| COURSE NAME | : | FUNDAMENTAL OF MULTIMEDIA COMPUTING |
| COURSE CODE | : | BIM 10103 |
| PROGRAMME | : | 1 BIM |
| EXAMINATION DATE | : | JUNE 2015 / JULY 2015 |
| DURATION | : | 2 HOURS 30 MINUTES |
| INSTRUCTION | : | ANSWER **ALL** QUESTIONS |

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

**Q1**   (a)   Define the terminology of multimedia.

(2 marks)

(b)   Describe linear and non-linear structure in multimedia.

(2 marks)

(c)   Consider the following scenario.

```
Your company has won a tender for developing a multimedia
project. As the director of the company, your responsibility
is to assign the right person as the project manager.
```

Apply your knowledge about multimedia development team to describe **FIVE (5)** key personals and their role.

(10 marks)

(d)   Outline **THREE (3)** differences between vector image and bitmap image. Provide your answer in a table.

(6 marks)

(e)   (i)   Describe mapping operation in computer-generated graphics.

(3 marks)

(ii)   State **TWO (2)** types of mapping.

(2 marks)

**Q2**   (a)   NTSC (National Television System Committee) is one of the standards for analogue broadcast color television. Explain **TWO (2)** other sets of standards available.

(6 marks)

(b)   List **FOUR (4)** factors which determine the size of a digital video file.

(4 marks)

(c)     Using uncompressed high-resolution, size (in KB) of one and half minutes HDTV video that use `64 bit` color, `1440 x 1080` resolutions, `33fps` with `48 kHz`, stereo and `16 bit` audio.

   (i)     Calculate the video file size (in KiloBytes).

(9 marks)

   (ii)    Calculate the audio file size (in KiloBytes).

(6 marks)

**Q3**     (a)     Define the following terminilogies:

   (i)     Sound.

(2 marks)

   (ii)    Frequency.

(2 marks)

   (iii)   Clipping.

(2 marks)

   (iv)    MIDI.

(2 marks)

   (b)     How to apply vector animation in Flash?

(4 marks)

   (c)     Demonstrate **FOUR (4)** types of animation.

(12 marks)

**Q4**     (a)     Explain **FOUR (4)** purposes of using Gestalt principles in visual design.

(8 marks)

   (b)     Analyze **TWO (2)** relations between visual design and usability with an appropriate examples.

(8 marks)

(c)      List **FOUR (4)** objects that visual communication can take place.

(4 marks)

(d)      Explain the importance of colour role in visual design.

(3 marks)

(e)      List **THREE (3)** primitive values in EGMAscript.

(3 marks)

**- END OF QUESTION -**