



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2012/2013**

**COURSE NAME : FUNDAMENTALS OF
MULTIMEDIA COMPUTING**

COURSE CODE : BIM 10103

PROGRAMME : 1 BIM

EXAMINATION DATE : JUNE 2013

DURATION : 2 HOURS AND 30 MINUTES

INSTRUCTION : ANSWER ALL QUESTIONS.

THIS QUESTIONS PAPER CONSISTS OF FIVE (5) PAGES

Q1 State whether each of the following statement is **TRUE** or **FALSE**:

- (a) The content of text consists of its visual attributes, such as the shape and size of characters, and their layout on the page. (1 mark)
- (b) UTF-10 is the default character set used on the World Wide Web. (1 mark)
- (c) An abstract character may have various graphic representations. (1 mark)
- (d) A glyphs is a collection of fonts. (1 mark)
- (e) Anti-aliasing is often applied to type to make it appear smoother. (1 mark)
- (f) Text fonts designed for print may also work well on screen. (1 mark)
- (g) Leading is the adjustment of the space between letter pairs to make them look more uniform. (1 mark)
- (h) A set of styles can be collected into a *stylesheet*, which may be attached to many documents to ensure a consistent and unified appearance. (1 mark)
- (i) Markup consists of annotations that control a text document's layout and formatting or indicate its structure. (1 mark)
- (j) Kerning is the distance between baselines. (1 marks)

- Q2**
- (a) List **THREE (3)** predominant formats for delivering digital animation. (3 marks)
 - (b) Describe the term of animation. (4 marks)
 - (c) Identify **TWO (2)** properties for each of the following animation types that could be able to interpolate:
 - (i) A bitmapped animation
 - (ii) A vector animation(4 marks)
 - (d) Explain **FOUR (4)** characteristics of an animated GIF. (8 marks)
- Q3**
- (a) Identify **THREE (3)** factors you should take into account when choosing a format and codec for Web video. (6 marks)
 - (b) Define types of video usage suitability for each of the following H.264/AVC set of profiles:
 - (i) Baseline Profile (BP)
 - (ii) Extended Profile (XP)
 - (iii) Main Profile(MP)
 - (iv) High Profile(HIP)(8 marks)
 - (c) Discuss about **THREE (3)** types of analogue video broadcast standard. (12 marks)
 - (d) Given the following scenario:

A user starts to download a 905 kilobyte movie of 30 seconds' duration, using progressive download over a connection that provides an average data rate of 2 Mbits per second.

 - (i) Specify the duration it will take before the movie starts to play.
 - (ii) Why might the user experience jerky playback? Give **ONE (1)** reason. (4 marks)

Q4 Given the following **FIGURE Q4**:

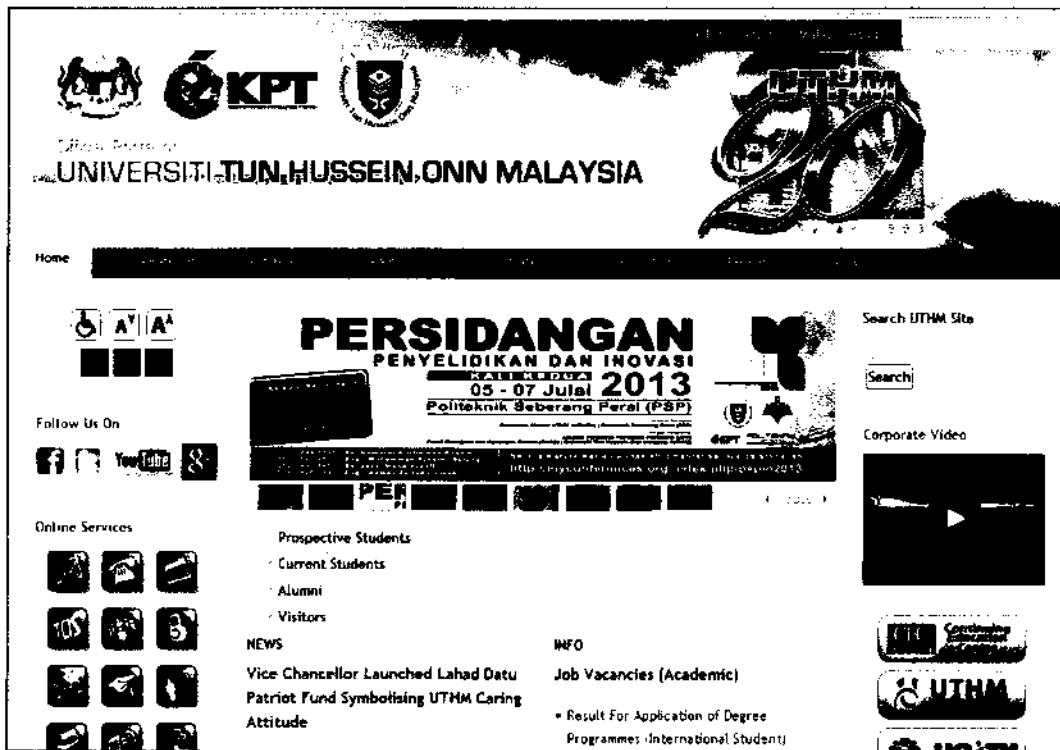


FIGURE Q4

- (a) Describe the relationship between visual design and usability. (4 marks)

- (b) According to gestalt principles of visual perception, discuss **TWO (2)** ways of recognizing group in a visual field. (6 marks)

- (c) Justify **THREE (3)** purposes of using gestalt principles when designing the layout and appearance of a web page as in **FIGURE Q4**. (6 marks)

- (d) Analyze **TWO (2)** gestalt principles applied in the above web site design in **FIGURE Q4**. (6 marks)

Q5 Based on the following information:

1. What is your email address?
2. What is your country of residence?
3. How many people live at your present address?
4. What gender are you (male or female)?

(a) Illustrate a web page containing the above information with suitable Flash UI Components for implementing interactivity controls.

(10 marks)

(b) Suggest another **THREE (3)** Flash UI Components that could be used for interactivity controls in multimedia application. Support your answer with appropriate diagram.

(9 marks)

-END OF QUESTION-