

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION SEMESTER III **SESSION 2014/2015**

COURSE NAME

: DIGITAL AUDIO AND VIDEO

TECHNOLOGY

COURSE CODE

: BIM 10203

PROGRAMME

: 1 BIM

EXAMINATION DATE : AUGUST 2015

DURATION

: 2 HOURS AND 30 MINUTES

INSTRUCTION

: ANSWER ALL QUESTIONS

THIS QUESTION PAPER CONSISTS OF TWO (2) PAGES

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- Q1 (a) Define **FIVE (5)** steps involved in digital audio pre-production process. (5 marks)
 - (b) Differentiate **TWO** (2) characteristics of *Binaural Recording* and *XY Recording*. Illustrate appropriate figures to support your answer. (8 marks)
- Q2 (a) Using Pulse Code Modulation (PCM) recording, how many bytes of data will be generated by a two minutes digital audio recording with stereo, 16 bits and 22.05 KHz settings? (10 marks)
 - (b) Calculate the file size (in MB) of one minute video with 64 bit colour, 800 x 640 resolution, 30 fps, CD quality audio and lossless compression. (12 marks)
- Q3 (a) Explain the concept of *Sound Envelope* using an appropriate figure. (9 marks)
 - (b) Compare **THREE** (3) differences between MPEG-2 and MPEG-4. (12 marks)
- Q4 (a) Illustrate a diagram to show the process of converting analogue video to digital video. (12 marks)
 - (b) Design a storyboard consists of **FOUR (4)** interfaces of your video project. The storyboard includes main scenes, scripts and multimedia files. (12 marks)

- END OF QUESTION -