PAST PAPER 2018-2020

QUESTION ONE (THIRTY MARKS)

a) Define the term Multimedia

[2 Marks]

- b) Explain the concept of using multimedia in everyday life [2 marks]
- c) GIF and JPEG are two commonly used image representations.
 - i. What images are suitable to be represented as GIF and JPEG?

[2 marks]

ii. Do they usually use lossless or lossy compression?

[2 marks]

d) Explain the difference between the major compression algorithm for lossless compression and lossy compression [4 marks]

e). What is MIDI?

- [2 marks]
- f) For each of the following media types(audio, graphics, images and video,) briefly discuss how sampling affects the quality of the data [8 marks]
- g) A new audio application transmits sound simulated as would be heard at a precise location within an acoustic space. This location must be allowed to vary and will be user-defined.
- Describe how this may efficiently be implemented via the internet [5 marks]
- h) Discuss two advantages of using vector graphics over bitmap graphics in creating digital images [3 marks]

QUESTION TWO (TWENTY MARKS)

- a) Explain why it is important to use a storyboard before starting your multimedia project using a multimedia authoring software [5 marks]
- b)Define interactivity and state three reasons why it is important to be incorporated in a multimedia presentation [5 marks]
- c) Explain what the term "animation" means as used in multimedia [2 marks]
- d) Discuss four characteristics of multimedia [4 marks]
- e) Discuss four uses of multimedia in everyday life [4 marks]
- f) Explain why a template contains customized font styles, color schemes and formatting [6 marks]

QUESTION THREE (TWENTY MARKS)

- a) Explain four ways in which adding animation can make to your multimedia presentation interesting [4 marks]
- b) Discuss four disadvantages of multimedia [4 marks]
- c) Explain the 3 stages of the multimedia project lifecycle [6 marks]
- d) Explain the term "frame" as used in video in multimedia [2 marks]
- e) Suggest two ways in which multimedia can be put to practical use in Multimedia University. For each use give an explanation [4 marks]

QUESTION FOUR (TWENTY MARKS)

- a) Explain four key properties of a good multimedia system [4 marks]
- b) Discuss two benefits of using multimedia authoring software [4 marks]

- c) List three problems that can arise in the course of carrying out a multimedia project [3 marks]
- d) Explain how you would compress images and videos you are going to transmit over the internet [6 marks]
- e) Discuss three reasons why color is important in a multimedia authoring tool[3 marks]

QUESTION FIVE (TWENTY MARKS)

- a) What are the differences between analog signals and digital signals? [4 marks]
- b) Explain the difference between linear and non-linear as used in multimedia [4 marks]
- c) For each of the following (text/audio/video/images/animation) describe how they can be captured by a multimedia authoring tool [10 marks]
- d) Define the term "space" as used in multimedia [2 marks]