

THE OPEN UNIVERSITY OF SRILANKA DEPARTMENT OF COMPUTER SCIENCE B.SC. (IT) DEGREE PROGRAMME 2024/2025

FINAL EXAMINATION

ITU5303 - MULTIMEDIA DESIGN AND TECHNOLOGY

DURATION: TWO HOURS ONLY (02 HOURS)

DATE: 21.06.2025

TIME: 1.30 pm - 3.30 pm

Answer FOUR (04) Questions ONLY. All questions carry equal marks. (25 Marks)

Q1.

- i. Identify and explain the key components of Multimedia.
- ii. State four (4) multimedia authoring tools.
- iii. Briefly describe the following terms.
 - a) HTML
 - b) XML
 - c) SMIL
- iv. What is multimedia authoring? Briefly describe.

Q2.

- i. State four (4) graphics and image editing tools.
- ii. Discuss the role of multimedia presentations in conveying information and engaging audiences.
- iii. Discuss the differences between Adobe Photoshop and Adobe Illustrator.
- iv. Briefly explain the differences between Multimedia and Hypermedia.

Q3.

- i. State five (5) key concepts used in VRML.
- ii. Discuss the characteristics of the Windows BMP image format.
- iii. Discuss the importance of image processing in the enhancement and manipulation of images.
- iv. What is multimedia broadcasting? Briefly describe.

- i. State four (4) color matching functions.
- ii. Discuss the key components of camera systems, including the lens, image sensor, and image processing.
- iii. Describe the following terms.
 - a) GIF
 - b) JPEG
 - c) TIFF
- iv. What are the five (5) major color matching techniques used in image processing?

Q5.

- i. What are the key considerations when selecting an editing and authoring tools for multimedia projects?
- ii. Explain the concept of digital video signals.
- iii. Describe the following terms.
 - a) HTML Canvas
 - b) Adobe Director
 - c) Adobe XD
- iv. What is Netpbm Format?

Q6.

- i. What is a pixel in the context of an image?
- ii. Describe the following terms.
 - a) Dithering
 - b) 1 bit images
- iii. List and briefly discuss about four (4) multimedia authoring metaphors.
- iv. Discuss the significance of Adobe Premiere in video editing. What features make it a preferred choice for professionals in the industry?