



FACULTY OF SCIENCE AND TECHNOLOGY
END OF SEMESTER EXAMINATIONS - APRIL 2025

PROGRAMME: MIT

YEAR/SEM: YEAR 2/SEMESTER 1

COURSE CODE: MIT813

NAME: MULTIMEDIA AND EMERGING TECHNOLOGIES

DATE: 2025-04-22

TIME: 2:00-5:00PM

INSTRUCTIONS TO CANDIDATES:

1. Read the instructions very carefully
2. The time allowed for this examination is STRICTLY three hours
3. Read each question carefully before you attempt and allocate your time equally between all the Sections
4. Write clearly and legibly. Illegible handwriting cannot be marked
5. Number the questions you have attempted
6. Use of appropriate workplace examples to illustrate your answers will earn you bonus marks
7. Any examination malpractice detected will lead to automatic disqualification.

DO NOT WRITE ANYTHING ON THE QUESTION PAPER

Section A Attempt all questions

Question 1:

A technology company is developing an educational multimedia platform that integrates videos, animations, virtual reality, and interactive simulations to enhance student learning. The platform aims to make education more engaging, accessible, and effective by using multimedia to cater to different learning styles.

Question:

- (a) Explain why multimedia is important in the context of the educational multimedia platform. (10 Marks)
- (b) Discuss the key forces driving the multimedia revolution and how they contribute to the growth of multimedia applications like the educational platform. (10 Marks)
- (c) Identify and explain three benefits of using multimedia in education. (10 Marks)
- (d) Provide one real-world example of a multimedia-based learning tool and explain how it enhances education. (10 Marks)

Section B Attempt a maximum of 3 questions.

Question 1:

- (a) Suggest a multimedia project and describe its topic. (5 Marks)
- (b) Explain the purpose of the project and its intended audience. (5 Marks)
- (c) List and describe the key multimedia elements (such as text, images, audio, video, and animation) that the project will contain. (5 Marks)
- (d) Identify the tools required to design and implement the project, including both hardware and software. (5 Marks)

Question 2:

Describe any two applications of multimedia in

- (a) Entertainment
- (b) Education
- (c) Business
- (d) Home (5 marks each)

Question 3:

- (a) Describe any five sources of digital images (10 marks)
- (b) Explain any five file types for storing digital images (10 marks)

Question 4:

- (a) Explain 6 examples of Multimedia Applications (12 marks)
- (b) With the aid of a simple diagram, illustrate the general overview of a multimedia system (8 marks)

Question 5:

When handling multimedia projects, it is vital to respect ethics and legal issues.

- (a) Explain why ethics and legal issues matter a lot in multimedia development (8 marks)
- (b) Describe any 3 types of intellectual property rights you would consider as a multimedia manager of a company, stating two examples of items covered under each IPR. (12 marks)

Question 6:

- (a) Give any 5 known trade marks (5 marks)
- (b) Explain the steps of registering a trademark in your country (10 marks)