



TECHNICAL UNIVERSITY OF MOMBASA

School of Humanities and Social Sciences

Department of Communication Studies

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN GRAPHIC DESIGN

HGD 2107 : COMPUTER-AIDED DESIGN

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2024

TIME: 2 HOURS

DATE: Pick Date Dec 2024

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FOUR** questions. Attempt question ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

Question ONE (30 Marks)

a) Define the following terms related to Computer-Aided Design:

- i. Hardware
- ii. Software
- iii. Operating System
- iv. Data Processing
- v. High-Level Language (10 marks)

b) Explain FIVE reasons why understanding computer hardware and software is essential in Computer-Aided Design. (10 marks)

c) Discuss the role of operating systems in managing CAD applications. Provide TWO examples of operating systems commonly used in design. (10 marks)

Question TWO (20 Marks)

- a) List and describe FIVE basic CAD commands used in creating 2D drawings. (10 marks)
- b) Explain how these commands enhance the efficiency of the design process in CAD applications. Provide an example for each command. (10 marks)

Question THREE (20 Marks)

- a) Identify FIVE key components of a CAD workstation and explain the function of each. (10 marks)
- b) Discuss the importance of organizing and managing CAD files to ensure an efficient workflow. (5 marks)
- c) Explain how backup systems support data security and management in CAD projects. (5 marks)

Question FOUR (20 Marks)

- a) Compare Adobe Photoshop and Adobe Illustrator in terms of their functionality and application in graphic design. (10 marks)
- b) Describe THREE basic functions of CorelDraw and its relevance in CAD. (5 marks)
- c) Discuss the advantages of mastering multiple design software tools for a successful career in graphic design. (5 marks)

Question FIVE (20 Marks)

- a) Define information systems and explain their role in Computer-Aided Design. (10 marks)
- b) Discuss how database management systems are used to organize and streamline design projects. (5 marks)
- c) Explain the significance of effective communication when working on CAD-related projects. (5 marks)