



MURANG'A UNIVERSITY OF TECHNOLOGY

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

UNIVERSITY ORDINARY EXAMINATION

2024/2025 ACADEMIC YEAR

SECOND YEAR FIRST SEMESTER EXAMINATION FOR BACHELOR

OF TECHNOLOGY IN MECHANICAL ENGINEERING

EMT205 – COMPUTER AIDED DESIGN

DURATION: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

1. Answer question ONE and any other two questions.
2. Mobile phones are not allowed in the examination room.
3. You are not allowed to write on this examination question paper.

SECTION A – ANSWER ALL QUESTIONS IN THIS SECTION

QUESTION ONE (20 MARKS)

Generate the models in figures 1.1, 1.2, 1.3 and 1.4. Use them to create the assembly shown in figure 1.5. (20 marks)

SECTION B – ANSWER ANY TWO QUESTIONS IN THIS SECTION

QUESTION TWO (15 MARKS)

- a) Replicate the sketch shown in figure 2. (5 marks)
- b) Use any commands that you see fit in order to generate the 3-D model shown in figure. (10 marks)

QUESTION THREE (15 MARKS)

Generate the 3-D model shown in figure 4. Be sure to use the sweep and mirror commands. (15 marks)

QUESTION FOUR (15 MARKS)

Generate the 3- D model show in figure 5. In your model, make use of the Revolve, Hole and pattern feature commands. (15 marks)