

MURANG'A UNIVERSITY OF TECHNOLOGY

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING

UNIVERSITY ORDINARY EXAMINATION

2017/2018 ACADEMIC YEAR

SECOND YEAR **FIRST** SEMESTER EXAMINATION FOR THE DIPLOMA IN ELECTRICAL AND ELECTRONIC ENGINEERING

SEE 1203 – ENGINEERING DRAWING II

DURATION: 2 HOURS

DATE: 19TH APRIL, 2018

TIME: 9.00 – 11.00 A.M.

Instructions to Candidates:

- 1. Answer Question 1 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

- a) Figure 1 attached is a machine block. Draw the following views in first angle projection.
 - i. Front elevation in direction of arrow A.
 - ii. A plan

(30 marks)

SECTION B – ANSWER ANY TWO QUESTIONS IN THIS SECTION

QUESTION TWO

- a) Construct a helix given outside diameter of 80mm and a pitch of 40mm for a length of 100mm (10 marks)
- b) With the aid of a neat schematic drawing, illustrate the following electrical circuit
 - i. Shunt dc motor
 - ii. Synchronous motor (10 marks)

QUESTION THREE

- a) Construct an Archimedean spiral given the radius of the circle AB is 75mm. (10 marks)
- b) Construct figure 2 attached in isometric projection. Use point x as lowest point (10 marks)

QUESTION FOUR

 a) Construct an ellipse using concentric circle method given major and minor axis as 90mm and 60mm (20 marks)