



KIBABII UNIVERSITY

**UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR**

**FIRST YEAR SECOND SEMESTER
SUPPLEMENTARY EXAMINATIONS**

**FOR THE DEGREE OF BACHELOR OF SCIENCE IN RENEWABLE
ENERGY AND BIO FUELS TECHNOLOGY**

COURSE CODE: REN 122

COURSE TITLE: ENGINEERING DRAWING II

DURATION: 2 HOURS

DATE: 1/10/2021

TIME: 2:00-4:00PM

INSTRUCTIONS TO CANDIDATES

- Answer **QUESTION ONE** (Compulsory) and any other **ONE** (1) Questions.
- Indicate **answered questions** on the front cover.
- Start every question on a new page and make sure question's number is written on each page.

This paper consists of **2** printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

SECTION A : COMPULSORY

QUESTION ONE (30 MARKS)

(a) With the aid of sketches differentiate between the Isometric and oblique Engineering projections

(7marks)

(b) Draw an ellipse placed vertically given the following dimensions : Major diameter = 80mm; Minor diameter = 50mm

(7 marks)

(c) Define the following terms applied in geometric drawing:

- (i) Epicycloid
- (ii) Ellipse
- (iii) Helix

(10marks)

(d) Draw a parabola given that the focus is 20mm away from the directrix

(6 marks)

QUESTION TWO (40 MARKS)

Figure 1 shows two cylinders arranged perpendicular to each other. Draw the following:

- (i) view in third angle
- (ii) Pattern for the small cylinder

QUESTION THREE(40 MARKS)

Draw an isometric projection of Figure 3

QUESTION FOUR (40 MARKS)

Draw the pattern of a square to circle transition piece shown in Figure 4.