



KIBABII UNIVERSITY

**UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR**

**FIRST YEAR SECOND SEMESTER
MAIN 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: 12th

INSTRUCTIONS TO CANDIDATES

- Answer **QUESTION ONE** (Compulsory) and any other **ONE (1)** Question.
- 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 5 printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

SECTION A : COMPULSORY

QUESTION ONE (20 MARKS)

(a) Draw a VERTICAL ellipse given the following: Major diameter = 80mm; Minor diameter = 50mm

(5 marks)

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

- (i) Ellipse
- (ii) Helix

(5 marks)

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

(5 marks)

(e) With the aid of FREE HAND sketches, differentiate between OBLIQUE and ISOMETRIC

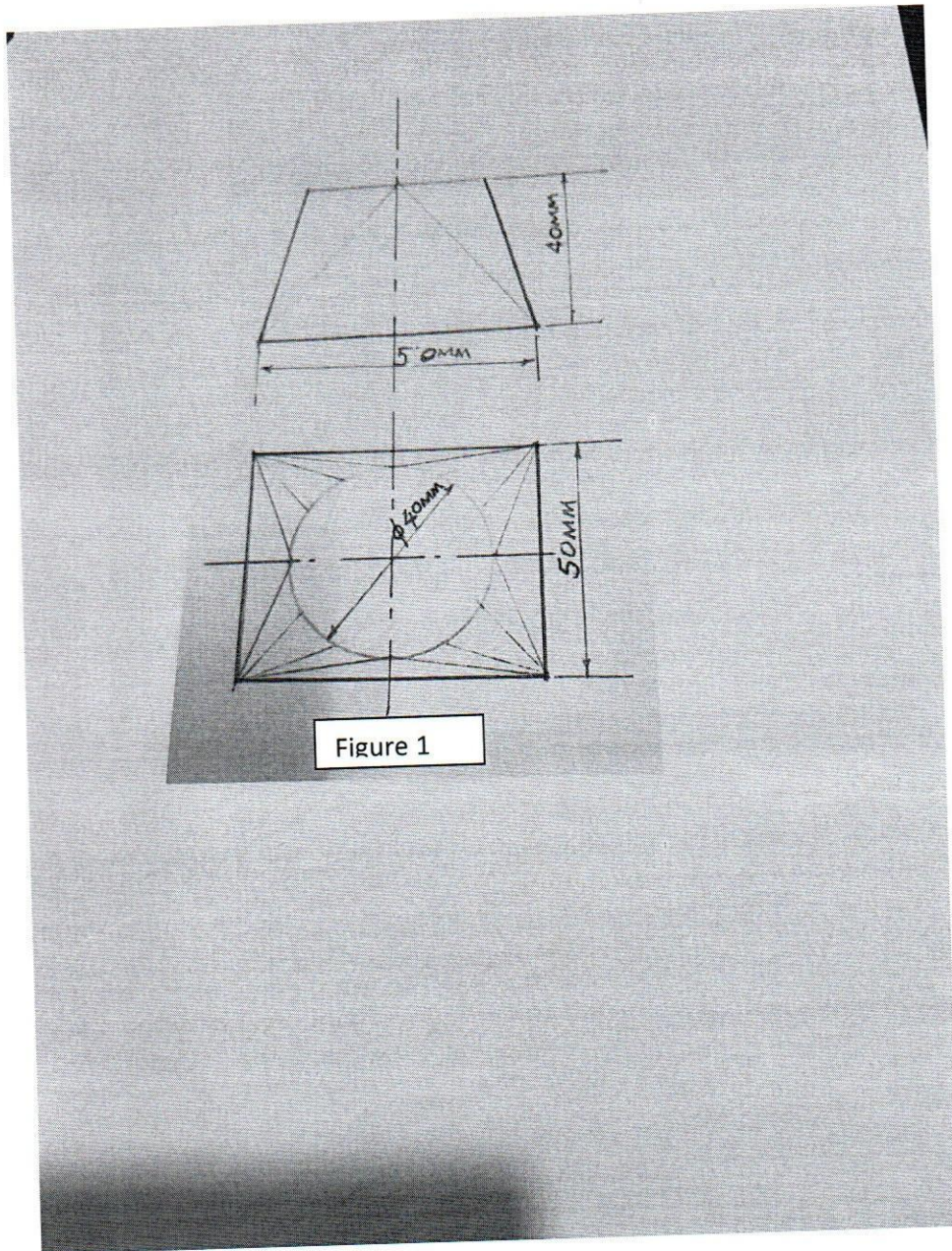
Engineering drawing

(5 marks)

SECTION B: ANSWER ONE QUESTION FROM THIS SECTION.

QUESTION TWO (20 MARKS)

Draw the pattern of a CIRCLE to SQUARE Transformer shown in Figure 1.



QUESTION THREE (20 MARKS)

From the oblique view given in figure 2, draw an isometric projection

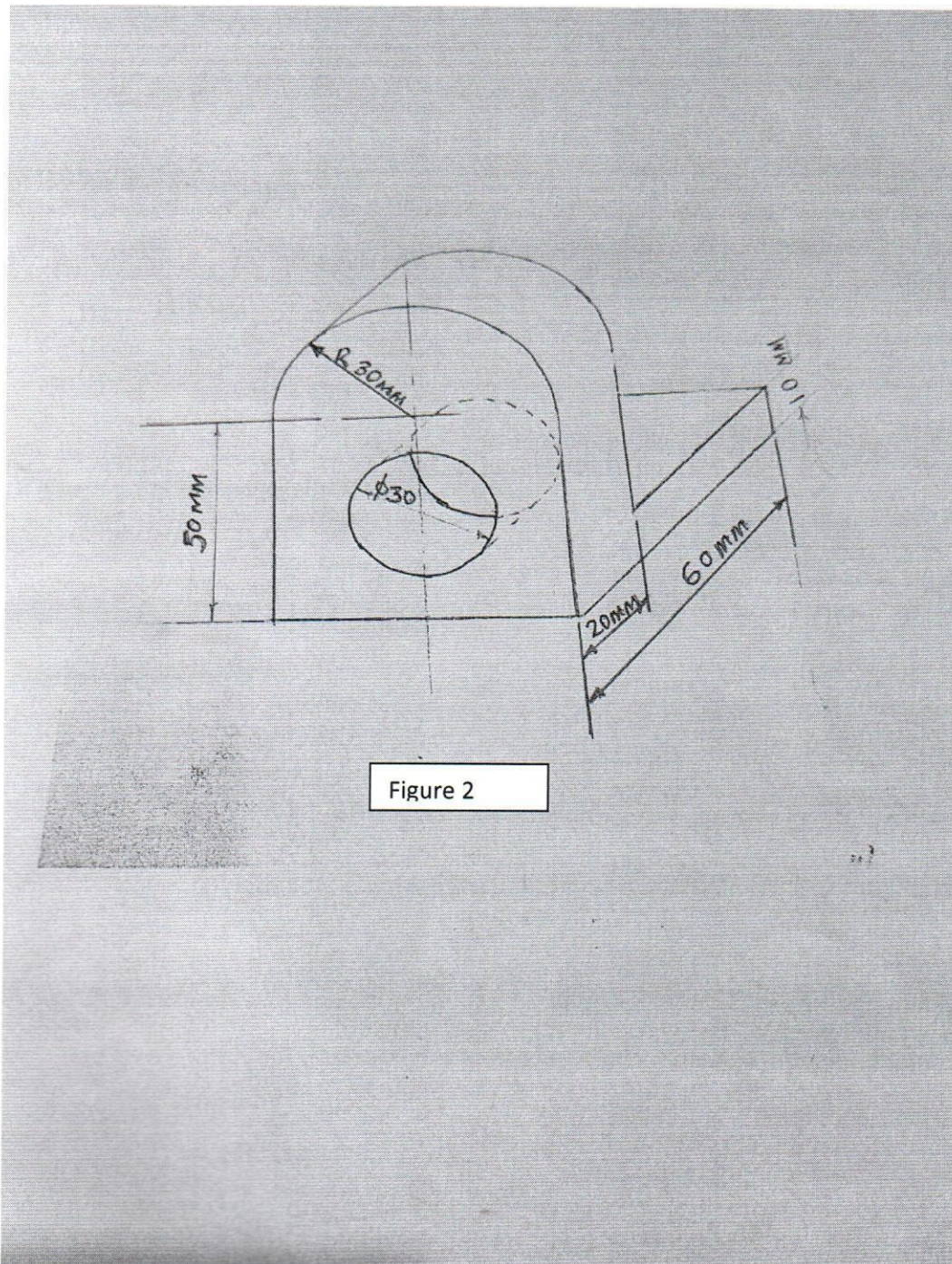


Figure 2

QUESTION FOUR (20 MARKS)

Figure 3 shows two cylinders A and B of different diameters meeting at right angles. Draw the following:

- (i) Views in third angle
- (ii) Pattern of cylinder A

