



# KIBABII UNIVERSITY

**UNIVERSITY EXAMINATIONS  
2021/2022 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: 29/07/2022**

**TIME: 2:00PM-4:00PM**

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## 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 **4** printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

SECTION A : COMPULSORY

QUESTION ONE (20 MARKS)

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

(5 marks)

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

- (i) Ellipse
- (ii) Parabola

(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)

Figure 1 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

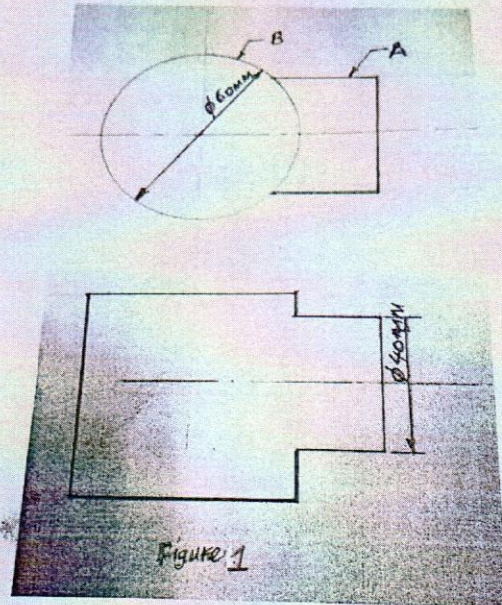
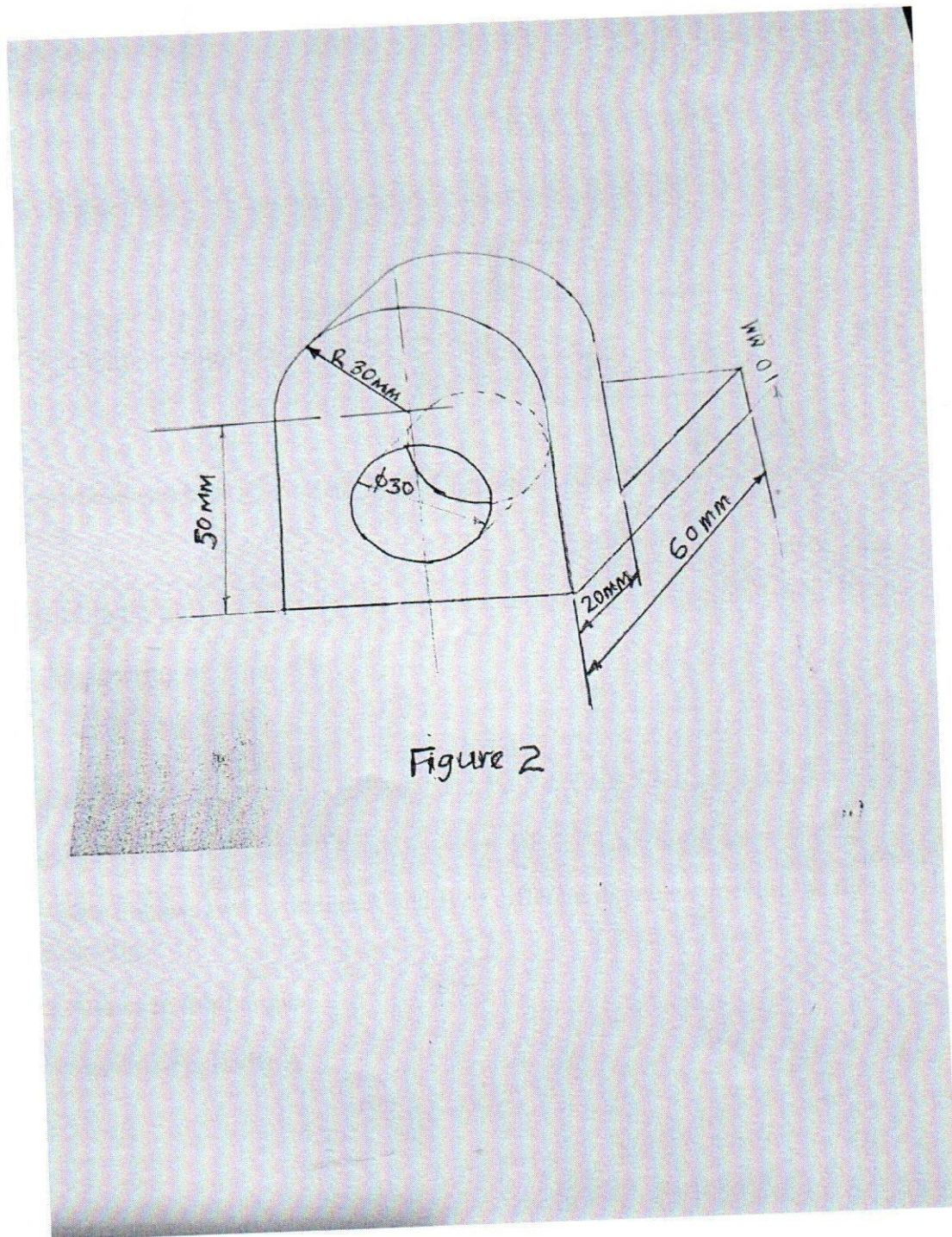


Figure 1

QUESTION THREE (20 MARKS)

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



QUESTION FOUR (20 MARKS)

Draw the pattern of a square to circle transition piece shown in Figure 3.

