

TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL & AUTOMOTIVE ENGINEERING

UNIVERSITY EXAMINATION FOR:

BTAP, BTRE, BTAC, BSFQ & BTMB

EME 4140 : TECHNICAL DRAWING

END OF SEMESTER EXAMINATION

SERIES: APRIL 2016

TIME: 3 HOURS

DATE: 20 May 2016

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID, Drawing paper A2 This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions. **Do not write on the question paper.**

Question ONE

A pictorial view of a MACHINE BRACKET is shown in the figure QN1 below. Draw to a FULL scale

in first angle orthographic projection the following views;

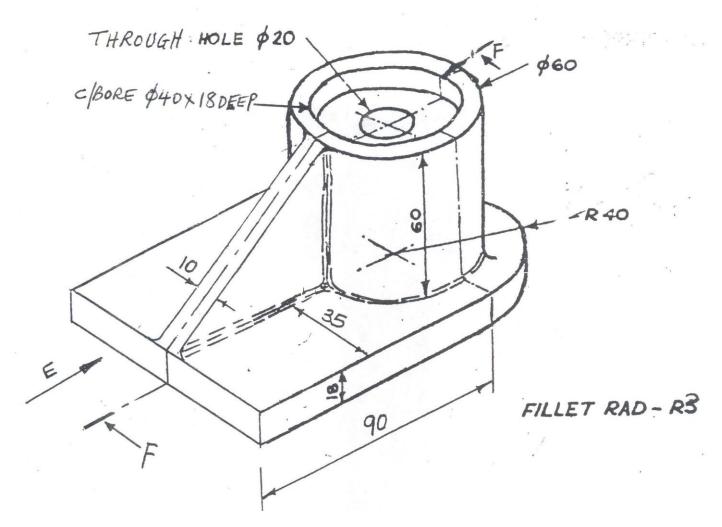
(a) Sectional front elevation along cutting plane FF

(b) End elevation in direction of arrow E

(c) Plan

Include SIX major dimensions and the symbol of projection.

(30 marks)





Question TWO

(a) Construct a diagonal scale in which 45mm represent 1m. The scale is to cover a range of 4m and to read to an accuracy of 10mm.

(10 marks)

(b) Using the scale construct a pentagon given circumscribing diameter 2m 470mm.

(10 marks)

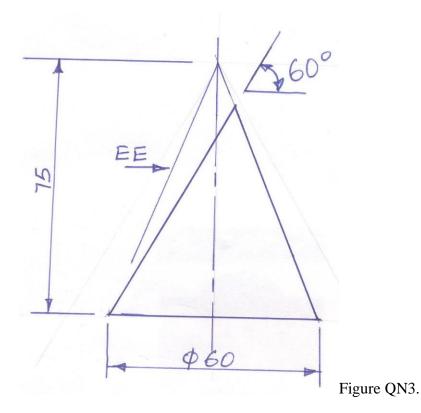
Question THREE

Figure QN3 shows a truncated right cone. Copy the given view and draw

- (a) Complete plan
- (b) End elevation from EE
- (c) True shape of the cut surface
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(d) Surface development

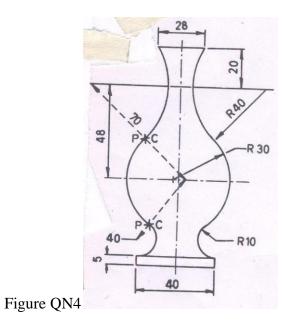
(20 marks)

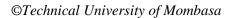


Question FOUR

Figure QN4 shows the outline of a flower pot. Draw the outline, marking the centre of each radius and showing clearly the method by which the centre was obtained.

(20 marks)





Question FIVE

Three views of a BRACKET drawn in first angle projection are shown in figure QN5. Draw the bracket in ISOMETRIC projection taking corner X as the lowest point.

(20 marks)

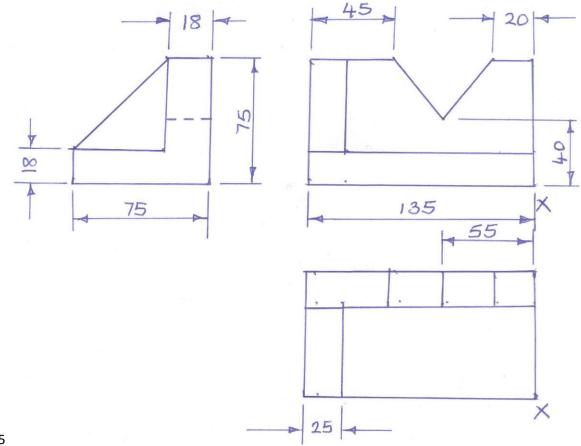


Figure QN5